

Knowledge, Attitude and Practice on Breastfeeding by Married Women in Rural Mangalore

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Abstract

Introduction: Breastfeeding is a natural act and an unequalled way of providing ideal food for the healthy growth and development of infants, it is also an integral part of the reproductive process with important implications for the health of mother. **Objectives:** To assess the knowledge, attitude, practice of exclusive breastfeeding among the married women in Mangalore. **Methodology:** A cross sectional study was conducted in rural areas of Mangalore for a period of one week. In among 110 randomly selected married women to assess the Knowledge, Attitude and Practice towards breastfeeding. **Results:** In our study, 68 (61.8%) belongs to the age group of 20 to 40 years. Of the 110, 90% knew about the importance of colostrums but only 37.3% knew that it helps mothers to lose weight after pregnancy. Around 75.5% were aware that breast feeding can help preventing diseases affecting breast and only 47.3 % knew about its contraceptive advantage. Most of them, 60 (54.54%) women disagreed with the fact that formula-feeding is more convenient than breastfeeding, 45 (40.91%) were of opinion that formula-fed babies are more likely to gain weight more quickly and 40 (36.36%) felt formula feeding is better choice for working women. Among the study participants, only 50.9% of the participants initiated breast feeding within half an hour and only 20(22.47%) women who were home makers exclusively breastfed their babies. 44.5% and 34.5% supplemented newborn with formula to improve babies health and because breast milk was insufficient respectively and it was seen more (79.35%) among women who were literates. **Conclusion:** The study concludes that even though women have good knowledge and almost all have positive attitude towards exclusive breastfeeding, still not all of them are practicing exclusive breast feeding and many still supplement newborns with formula feeding even though not recommended.

Keywords: Exclusive breastfeeding, knowledge, attitude, practice.

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INTRODUCTION

Breastfeeding is also known as nursing [1]. Historically, breastfeeding has generally considered by health professionals as the ideal feeding practice for infants. It is the first communication pathway between the mother and her infant. Previous studies have confirmed that breastfeeding has advantages for both babies and mothers, which includes boosting the babies immune system [2], protecting against several chronic illnesses asthma, allergies, obesity and diabetes [3] and in mothers increasing child spacing, earlier return to pre-pregnancy weight [3] and reducing the risk for type 2 diabetes and malignancies such as breast and ovarian cancer [4]. In addition, infants can absorb and digest breast milk more easily than baby formula [2] and is an ideal food for the infants as breast milk has the specific characteristics that match the growing infants' nutritional requirements [5].

Breastfeeding also acts as an important public health strategy for improving infant and child morbidity and mortality, improving maternal morbidity, and hence helping the society by controlling health care costs [1]. Breastfeeding has declined worldwide in recent years, as a result of urbanization and maternal employment outside the home [6]. Other reasons are having an unsupportive partner, feeling embarrassed, concerns about pain, and physical/medical problems [3].

Breastfeeding initiation was determined by income, education, maternal smoking, whether the pregnancy was intended, and mode of delivery. Breastfeeding support from hospital delivery nurses, lactation specialist or peer counselor, or receipt of free formula packets in the hospital, have also been described as important influences on women's breastfeeding decisions.^[3]

In India, breastfeeding appears to be influenced by social, cultural, and economic factors [2]. Early initiation of breastfeeding is not seen in over 75% of the nation's children and over 50% of children are not exclusively breastfed [7]. In India about 2.4 million children die each year of which two-thirds are associated with infant feeding practices which are inappropriate [8].

It is the responsibility of the doctor to educate a mother about the breastfeeding. The primary health centre and also the Anganwadis play a major role in educating the rural mothers about exclusive breastfeeding up to the age of 6 months.

This study was conducted to know the prevalence of knowledge, attitude and practice about breastfeeding among the women in rural Mangalore and to educate the mother about appropriate methodology of breastfeeding and to clear the misconceptions of breastfeeding.

MATERIAL AND METHODOLOGY

A descriptive cross sectional study was conducted in rural areas of Mangalore March 2018. The study was carried out among 110 randomly selected married women to assess the Knowledge, Attitude and Practice towards breastfeeding. Convenient sampling was used in the study. Institutional Ethical clearance committee approval was taken prior conducting the study.

Data was collected using a pre tested structured close ended Questionnaire based on Knowledge, Attitude and Practice of breastfeeding through face to face interview. Verbal informed consent was obtained from each respondent after explaining the nature and purpose of the study. The study did not pose any harm to the respondent. The collected data was checked for completeness, coded and entered into the Microsoft excel.

The data was analyzed using SPSS 25 software, summarized using descriptive statistics and presented using frequency, percentage and tables for categorical variables. Association between the two variables was assessed using chi square and P value of <0.05 was taken as statistically significant.

RESULT

The cross sectional study was conducted on Knowledge, Attitude and Practice of breast feeding among 110 women out of which 68 (61.8%) belong to the age group of 20 to 40 years, 92 (83.6%) were Muslims, 89 (80.9%) were housewives, 40 (36.4%) have completed their 10th grade and 107 (97.3%) were married. Most of them belong to nuclear families i.e. 63 (57.3%). 62 (56.4%) women had normal delivery and 62 (56.4%) of them have 1 to 2 children (Table 1 and 2).

Table-1: Socio-economic characteristics of the study participants

Age	Number (N=100)	Percentage (%)
20-40	68	61.8
>40	42	38.2
Religion		
Hindu	16	14.5
Muslim	92	83.6
Christian	2	1.8
Occupation		
Agriculture	2	1.8
Laborer	14	12.7
Housewife	89	80.9
Employee in service	2	1.8
Others	3	2.7
Marital status		
Married	107	97.3
Widow	3	2.7
Education		
Illiterate	18	16.4
Primary schooling	32	29.1
High school	40	36.4
Pre-university	16	14.5
Graduate	4	3.6
Type of family		
Nuclear	63	57.3
Three generation	7	6.4
Joint	40	36.4

Socio-economic status		
Class I	9	8.2
Class II	27	24.5
Class III	32	29.1
Class IV	31	28.2
Class V	11	10.0

Table-2: Information on the type of delivery and number of children

Type of delivery	Number (n)	Percentage (%)
Normal	62	56.4
LSCS	48	43.6
Number of children		
1-2	62	56.36
≥3	48	43.64

On assessing the knowledge of breast feeding among participants, 109(99.1%) were aware that breast milk is easily digested than formulated feeds. Only 41 (37.3%) women were aware that breast feeding helps mothers to lose weight after pregnancy and 45(40.9%) were aware that breast feeding helps the uterus to return to its pre-pregnancy state more quickly. Knowledge about colostrums was there among 102(92.7%) women and 101(91.8%) had knowledge that exclusive breast feeding should be done till 6 months (Table-3).

Of the 110, 95 (86.4%) women thought that infant formula and breast milk have same health benefits, 89 (89.9%) of them told that pacifiers should be administered when the baby cry and 84 (76.4%) of them told that mother should not breast feed when she has diarrhea. 83 (75.5%) were aware that breast feeding can help preventing diseases affecting breast only 52 (47.3%) knew about the contraceptive advantage of breast feeding to mother (Table-3).

Table-3: Knowledge about breastfeeding among the study participants

Knowledge about breast feeding	Correct answer(n)	Percentage (%)
Breast milk is more easily digested than formula (true)	109	99.1
Breastfeeding helps mothers to lose weight after pregnancy (true)	41	37.3
Breastfeeding helps the uterus to return to its pre- pregnancy state more quickly. (true)	45	40.9
Breast milk contains all the essential nutrients for a newborn child (true)	108	98.2
Colostrum contains essential antibodies necessary to help the child's immune system (true)	102	92.7
Exclusive breastfeeding should be done till 6 months (true)	101	91.8
Breastfeeding can be continued up to 2 years (true)	102	92.7
Lactating mother should take healthy food to improve secretion of milk (true)	108	98.2
During breastfeeding the mother should sit comfortably (true)	89	80.9
During breastfeeding the mother should maintain eye to eye contact and talk with the baby (true)	89	80.9
Wash each breast with warm water before feeding (true)	99	90
Awakening the baby while breastfeeding (true)	67	60.9
Breastfeeding can help preventing diseases affecting breast (true)	83	75.5
Contraceptive advantage of breastfeeding to mother (true)	52	47.3
Infant formula and breast milk have the same health benefits (false)	95	86.4
Stop breastfeeding when you start weaning (false)	98	89.1
Mother should not breastfeed the child when she has diarrhea (false)	84	76.4
Babies should be given pacifiers when they cry (false)	89	89.9

The fact that intimacy between mother and infant can be enhanced while breast feeding was agreed by 94 (85.45%) women and 72(65.45%) agreed that breast feeding is more convenient and cheaper than formula. Breast feeding is the better choice for an infant even after the mother resumes work according to 57 (51.82%) women and 53(48.18%) of them agreed that women can breastfeed anywhere, including public

places. Forty seven (42.72%) of them opined that formula-fed babies are more likely to gain weight more quickly than breast-fed infants.

About practice of breast feeding among the study participants, only 26 (45.61) of the study participants who had normal delivery initiated breast feeding within half an hour of delivery. Of the 110

study participants, 87 (79.9%) women exclusively breast fed up to 6 months. Of all the newborns who were supplemented with formula 49 (44.5%) supplemented to improve babies health and 38 (34.5%)

because breast milk was insufficient. Though supplements were fed by different methods, 79.1% prefer the cup and spoon method (Table 4).

Table-4: Practice of breastfeeding among the study participants

Practice of breast feeding		Frequency (n)	Percentage (%)
Initiation of breastfeeding	Within half an hour	56	50.9
	Within 4-6 hrs	49	44.5
	Within 24 hrs	5	4.5
Exclusive breastfeeding	Up to 3 months	14	12.7
	Up to 9 months	9	8.2
	Up to 6 months	87	79.1
How often to feed the baby	Whenever baby demands	72	65.4
	Every 1-2 hrs	30	27.3
	Every 2-3 hrs	8	7.3
Supplementing newborns with formula	To improve babies health	49	44.5
	Because breast milk was not sufficient	38	34.49
	Doctors advise	23	20.91
How long the baby should suckle	For limited time	31	28.2
	For as long as the baby wants	79	71.8
Supplements are fed by	Bottle	14	12.7
	Palade	7	6.3
	Cup and spoon	87	79.1
	Others	2	1.8

Women in the age group 20-40yrs had better knowledge about colostrums (97.1%) and about the contraceptive advantage of breast feeding (54.29%). Women whose education level was Pre University and above knew the importance of colostrums (100%), knew that breast milk has more benefits than infant formula (90.48%) and that mother can breast feed the

baby even when she has diarrhea (85%). Women from nuclear families knew better that baby should be awakened while breast feeding (72.58%) compared to those from three generation or joint family (45.83%) and the association was statistically significant (P value- 0.0043) (Table 5 and 6).

Table-5: Factors associated with knowledge about breast feeding among study participants

Knowledge about breast feeding			True, n (%)	False, n (%)	P value
Colostrum contains essential antibodies necessary to help the child's immune system	Age	20-40yrs	67 (97.1%)	3 (2.9%)	X^2 -2.546, 0.1105
		>40yrs	35 (87.5%)	5 (12.5%)	
	Religion	Hindu	13 (81.25%)	3 (18.75%)	X^2 - 3.523, 0.0605
		Muslim	87 (94.57%)	5 (5.43%)	
	Type of family	Nuclear	57 (90.48%)	6 (9.52%)	X^2 - 1.107, 0.2925
		Three generation and joint	45 (95.74%)	2 (4.26%)	
	Education	High school and below	82 (91.11%)	8 (8.89%)	-
		Pre university and above	20 (100%)	0	
Exclusive breastfeeding should be done till 6 months	Age	20-40yrs	64 (91.43%)	6 (8.57%)	X^2 - 0.038, 0.843
		>40yrs	37 (92.5%)	3 (7.5%)	
	Religion	Hindu	13	3	X^2 - 2.668,

			(81.25%)	(18.75%)	0.102
		Muslim	86 (93.48%)	6 (6.52%)	
	Type of family	Nuclear	57 (90.48%)	6 (9.52%)	X^2 - 0.353, 0.5521
		Three generation and joint	44 (93.62%)	3 (6.38%)	
	Education	High school and below	85 (94.44%)	5 (5.56%)	X^2 - 4.544, 0.033
		Pre university and above	16 (80%)	4 (20%)	
Awakening the baby while breastfeeding	Age	20-40yrs	44 (62.86%)	26 (37.14%)	X^2 -0.306, 0.579
		>40yrs	23 (57.5%)	17 (42.5%)	
	Religion	Hindu	10 (58.82%)	7 (41.18%)	X^2 -0.148, 0.700
		Muslim	58 (63.74%)	33 (36.26%)	
	Type of family	Nuclear	45 (72.58%)	17 (27.42%)	X^2 - 8.129, 0.0043
		Three generation and joint	22 (45.83%)	26 (54.17%)	
	Education	High school and below	52 (58.43%)	37 (41.57%)	X^2 -1.206, 0.272
		Pre university and above	15 (71.43%)	6 (28.57%)	
	Age	20-40yrs	38 (54.29%)	32 (45.71%)	X^2 -3.798, 0.0513
		>40yrs	14 (35%)	26 (65%)	
Contraceptive advantage of breastfeeding to mother	Religion	Hindu	9 (56.25%)	7 (43.75%)	X^2 - 0.614, 0.433
		Muslim	42 (45.65%)	50 (54.35%)	
	Type of family	Nuclear	30 (47.62%)	33 (52.38%)	X^2 - 0.007, 0.932
		Three generation and joint	22 (46.81%)	25 (53.19%)	
	Education	High school and below	40 (44.44%)	50 (55.56%)	X^2 - 1.588, 0.207
		Pre university and above	12 (60%)	8 (40%)	

*P value<0.05 is considered statistically significant

Table-6: Factors associated with knowledge about breast feeding among study participants

Knowledge about breast feeding			False, n (%)	True, n (%)	P value
Infant formula and breast milk have the same health benefits	Age	20-40yrs	60 (85.71%)	10 (14.29%)	X^2 - 0.068, 0.792
		>40yrs	35 (87.5%)	5 (12.5%)	
	Religion	Hindu	14 (82.35%)	3 (17.65%)	X^2 - 0.238, 0.625
		Muslim	79 (86.81%)	12 (13.19%)	
	Type of family	Nuclear	52 (83.87%)	10 (16.13%)	X^2 -0.749, 0.386
		Three generation and joint	43 (89.58%)	5 (10.42%)	
	Education	High school and below	76 (85.39%)	13 (14.61%)	X^2 -0.372, 0.541
		Pre university and above	19 (90.48%)	2 (9.52%)	
Mother should not breastfeed the child when she has diarrhea	Age	20-40yrs	51 (72.86%)	19 (27.14%)	X^2 - 1.311, 0.252
		>40yrs	33 (82.5%)	7 (17.5%)	
	Religion	Hindu	13 (81.25%)	3 (18.75%)	X^2 -0.291, 0.589
		Muslim	69 (75%)	23 (25%)	
	Type of family	Nuclear	48 (76.19%)	15 (23.81%)	X^2 -0.002, 0.960
		Three generation and joint	36 (76.6%)	11 (23.4%)	
	Education	High school and below	67 (74.44%)	23 (25.56%)	X^2 -1.010, 0.315
		Pre university and above	17 (85%)	3 (15%)	
Babies should be given pacifiers when they cry	Age	20-40yrs	58 (82.86%)	12 (17.14%)	X^2 -0.472, 0.491
		>40yrs	31 (77.5%)	9 (22.5%)	
	Religion	Hindu	14 (87.5%)	2 (12.5%)	X^2 -0.578, 0.446
		Muslim	73 (79.35%)	19 (20.65%)	
	Type of family	Nuclear	50 (79.37%)	13 (20.63%)	X^2 -0.227, 0.633
		Three generation and joint	39 (82.98%)	8 (17.02%)	
	Education	High school and below	71 (78.89%)	19 (21.11%)	X^2 - 1.307, 0.252
		Pre university and above	18 (90%)	2 (10%)	

*Pvalue <0.05 is considered statistically significant

Of the 88 house wives, 69 (78.41%) exclusively breast fed the babies for 6 months compared to 15 (68.18%) working mothers. Women who had education up to primary were found to practice

exclusive breast feeding and on demand feeding more compared to those who had education up to high school and above (Table 7).

Table-7: Factors associated with practice about breast feeding among study participants

Exclusive breast feeding		Up to 3 or 9 months	Up to 6 months	X ² , value	p
Occupation	House wives	19 (21.59)	69 (78.41)	1.019, 0.312	
	Working mother	7 (31.82)	15 (68.18)		
Education	Primary and below	3 (6.52)	43 (93.48)	3.398, 0.0652	
	High school and above	12 (18.75)	52 (81.25)		
Type of family	Nuclear	16 (25.40)	47 (74.60)	0.253, 0.614	
	Three generation and joint	10 (21.28)	37 (78.72)		
How often feed the baby		On demand	Timed feeding		
Occupation	House wives	58 (65.91)	30 (34.09)	0.982, 0.321	
	Working mother	12 (54.54)	10 (45.45)		
Education	Primary and below	35 (70)	15 (30)	1.604, 0.205	
	High school and above	35 (58.33)	25 (41.67)		
Type of family	Nuclear	40 (63.49)	23 (36.51)	0.0013, 0.97	
	Three generation and joint	30 (63.83)	17 (36.17)		
Supplementing newborns with formula		Improve health	Breast milk insufficient	Doctors advise	
Occupation	House wives	24 (27.27)	62 (70.46)	2 (2.27)	0.58, 0.747
	Working mother	7 (31.82)	14 (63.64)	1 (4.54)	
Education	Primary and below	12 (24)	37 (74)	1 (2)	1.066, 0.586
	High school and above	19 (31.67)	39 (65)	2 (3.33)	
Type of family	Nuclear	17 (26.98)	45 (71.43)	1 (1.59)	0.89, 0.639
	Three generation and joint	14 (29.79)	31 (65.96)	2 (4.25)	

*Pvalue <0.05 is considered statistically significant

DISCUSSION

In this cross-sectional study conducted on Knowledge, Attitude and Practice of breast feeding among 110 women, 99.1% women knew that breast milk is easily digested than formula feeds. In a study done by Altaf Naseem *et al.*, [8] 20.5% knew that breast feeding helps in preventing further conception compared to 47.3% in our study.

In our study, 98.2% women knew that breast milk contains all the essential nutrients for the newborn while in the study conducted by Sohair AM Shommo *et al.*, [1] it was only 27.1%. This difference might be because our study included women of all the age group while in their study only mothers who had at least one child aged five years or younger were included.

Our study showed that 92.7% of women knew about colostrum compared to 99.2% in the study done by Poreddi Vijayalakshmi *et al.*, [6]. In our study 91.8% women knew that exclusive breastfeeding is done for 6 months compared to 85.2% in study done by Poreddi Vijayalakshmi *et al.*, [6] and 68.4% in a study done by Abdulmaleek Musa Aliyu *et al.*, [5]. Women in our study had better knowledge that breastfeeding can be continued upto 2 years (92.7%) and that they have to take healthy food to improve secretion of milk (98.2%)

compared to the study done by Poreddi Vijayalakshmi *et al.*, [2] (68% and 90.4% respectively).

In our study 52.73% agreed that breast milk alone is insufficient for the baby during the first six month of life compared to 30.4% in the study done by Abdulmaleek Musa Aliyu *et al.*, [5].

In a study done by Sohair AM Shommo *et al.*, [1] 70% mothers had initiated breast feeding immediately after birth compared to only 50.9% in our study.

CONCLUSION

The current study showed that even though women have good knowledge about breastfeeding, they are lacking appreciable practice of breastfeeding. To improve the scenario, breastfeeding should be a part of public health education and whole community must be reached.

While conducting this study we found that, the major cause for not able to practice exclusive breastfeeding is because they switch to formula feeding as they have to resume working and find formula feeding more convenient. Also some think that formula fed babies gain more weight compared to breast fed

babies. Hence advantages of breastfeeding over formula feeding must be emphasized to encourage breastfeeding.

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