

Knowledge, attitude and determinants of breastfeeding among ante-natal women at a teaching hospital at Wayanad, Kerala: A cross-sectional study

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Abstract

Introduction: Breastfeeding is best gift for child from mother. It is safe, adequate to fulfill nutrition in early life, provides with immunity for protection from various diseases. Exclusive breastfeeding is affected due to various cultural practices which exists, or, due to lack of knowledge of mother and other family members, or, because, mother has to return to work and doesn't have enough maternity leaves or proper feeding area in the workplace. The present study is done to assess knowledge and attitude of ante-natal women towards breastfeeding.

Material and Methods: 120 women who had come for routine ante-natal checkup to DM WIMS hospital, Wayanad, Kerala were included in the present study. A semi-structured questionnaire containing various aspects of breast feeding and basic information of the participants was used to assess the knowledge, attitude and find determinants of breast feeding.

Results: 55.8% participant were in the age group 18-25yrs. The mean age of study participant was 25.4 years. 50% of the participants were nulliparous, 30% primiparous and 20% were multiparous. 43.3% of the study participants knew the importance of breastfeeding and only 37.5% knew about colostrum. 93.3% participants considered breast milk healthier than artificial substitute like formula milk, etc. Majority of participants received information about breastfeeding from media (54%) and doctors (41%). 77% of participants said presence of strangers affect breastfeeding and 56% said crèche should be available at all work places. A significant association was seen between age and breastfeeding (p-value 0.003), and also between, age and knowledge of colostrum (p-value 0.002), in the present study. Association between parity and breastfeeding, and, parity and colostrum was also found to be significant in our study with p-value 0.001 and 0.007 respectively.

Conclusion: In the present we found that, mother's knowledge and attitude towards breastfeeding was favorable, but, still more efforts are required to reach WHO recommended prevalence of 90%.

Keywords: Breastfeeding, knowledge, attitude, colostrum, Wayanad.

Introduction

The best gift from mother to her newborn is breast milk. It is not only nutritive but also protective. It also increases the emotional bonding between mother and infant. The World Health Organization (WHO) and United Nations Children's Fund (UNICEF) recommends that every infant should be exclusively breastfed for the first six months of life, and, it should be continued for up to two years of age or longer along with complementary food.¹ Breastfeeding should be started immediately after birth. The first milk contains thick, yellow colored colostrum. It is rich in proteins, carbohydrates, vitamin A and sodium chloride, and, contains lower amounts of lipids, fat, and potassium than normal milk.² It is best for newborns premature digestive system. In addition, it contains various immunoglobulin's like IgA (reactive to Escherichia coli virulence associated proteins) IgG, IgM and, various cytokines and growth factors.^{3,4} Thus, it can be considered as first vaccine for infant for his survival and to fight various infections.

One of the main cause of neonatal mortality and morbidity is inadequate breastfeeding due to lack of knowledge of mother regarding its importance and benefits.⁵ Worldwide as many as 4,000 infants and young children die because they are not breastfed

within the first hour after birth. In many countries, infants are given liquids other than mother's milk in the first few days after birth, as part of their cultural beliefs and practices.⁴ They neglect "COLOSTRUM", instead, infants are given sugar water, plain water, honey, etc. All these practices lead to suppression of lactation, as prolactin gradually ceases and the breast stops secreting milk.⁴ It also risks the infant's health as they become more prone to diarrhea and other infectious diseases due to mixed feeding practices.⁶

In South Asia, only 24-26% of babies born in India, Pakistan, and, Bangladesh are breastfed within 1 hour while the corresponding rate for Sri Lanka is 75% and National Family Health Survey (NFHS-3) data show proper initiation & continuation of breastfeeding in children under 6 months is only 46.4%.^{7,8} Suboptimal breastfeeding was ranked by the Global Burden of Diseases, Injuries, and, Risk Factor Study to be the second largest risk factor for children under five, accounting for the loss of 47.5 million Disability Adjusted Life Years (DALYs) in 2010.⁹ According to the Lancet's Series on Child Survival, increasing breastfeeding prevalence to optimal levels could reduce 13% of all child deaths in low income countries.¹⁰

Despite many awareness programs given to mother regarding benefits of breastfeeding, we still see mothers

to follow ill breast feeding techniques. Therefore, the present study was undertaken with the objective to assess knowledge, attitude, and, determinants of breastfeeding among antenatal women coming to DM WIMS hospital, Wayanad, Kerala, for antenatal checkup.

Material and Methods

This study is a cross-sectional descriptive study done in DM WIMS medical college hospital, Wayanad, Kerala, during April-May 2018. All pregnant ladies attending antenatal check-up during this period were included in the study. After obtaining informed consent, a total of 120 women accepted to enter the study. A semi-structured questionnaire containing various aspects of breastfeeding was used. The questionnaire consisted of socio-demographic variables like age, gravida, parity, employment status, type of family, etc. of the participants and 10 questions to assess the

knowledge, attitude, and determinants of breastfeeding among them. The study was approved by institutional ethical committee of DM WIMS.

The data was analyzed using SPSS 21. The results were tabulated and expressed in terms of percentages and proportions pertaining to the questionnaire answered by the study participants. The results are expressed based on the three domains namely attitude, knowledge and determining factors on breastfeeding.

Results

120 antenatal women were included in the present study. Table 1 gives the background information about study participants. 55.8% participants were in the age group 18-25yrs. The mean age of study participant was 25.4 years. 22% of participants were unemployed, whereas, 76% did not reveal their employment status. 50% of them were nulliparous, 30% primiparous and 20% were multiparous.

Table 1: Background information about participants

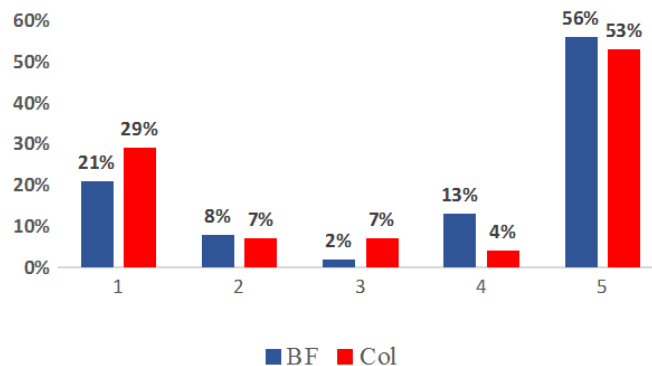
Characteristics	Group	Frequency (%) n=(120)
Age (yrs)	18-25	67 (55.8%)
	26-40	53 (44.2%)
Employment status	Employed	3 (2%)
	Unemployed	26 (22%)
	Not revealed	91 (76%)
Parity	Nulliparous	61 (50%)
	Primiparous	35 (30%)
	Multiparous	24 (20%)

When assessed the knowledge and attitude about breastfeeding, 43.3% of the study participants knew the importance of breastfeeding (Table 1: Background information about participants). Out of 43.3% who considered breastfeeding important, 56% said it is very important (Fig. 1). Only 37.5% knew about colostrum (Table 2) and 53% of them considered it very important (Fig. 1). 79% said breastfeeding is beneficial to both mother and baby and 63% said that an infant should be breastfed 10-15 times a day (Table 2). 91.6% of study

participants knew the importance of nutritious food intake like green leafy vegetable, milk, iron rich foods, etc during antenatal period and during breastfeeding (Table 2). 93.3% participants considered breast milk healthier than artificial substitute like formula milk, etc (Fig. 2). Majority of participants received information about breast feeding from media (54%) and doctors (41%). Other sources of information (5%) was from advertisement and government health workers (Fig. 3).

Table 2: Knowledge and attitude about breastfeeding among ante-natal women

Sl no	Question	Response
1	Meaning of exclusive breast feeding	52 (43.3%)
2	Colostrum	45 (37.5%)
3	Correct technique of breast feeding	113 (91%)
4	Increase food intake during breast feeding	110 (91.7%)
5	Breastfeeding is beneficial to both mother and baby	95 (79%)
6	Infant should be breastfed 10-15 times a day	76 (63%)
7	Importance of nutritious food intake	110 (91.6%)



*1: Not at all important; 5: Very important

Fig 1: Importance of exclusive breastfeeding and colostrum

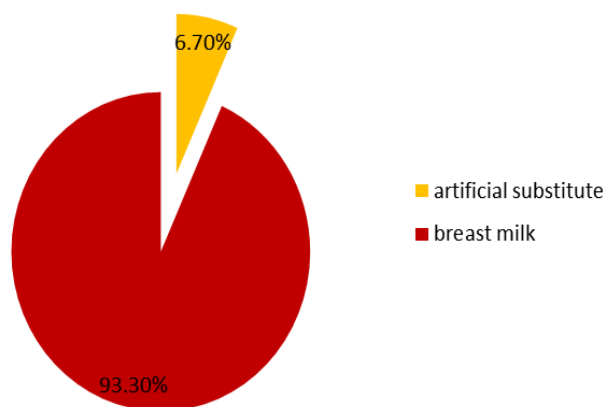


Fig 2: Which is healthy breast milk or artificial substitutes like formula milk, etc??

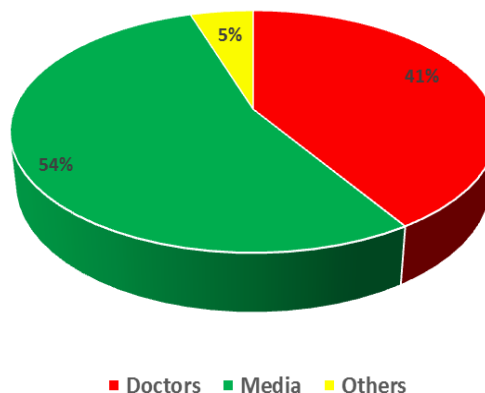


Fig 3: Source of information and knowledge about breastfeeding

Table 3 shows various factors affecting breastfeeding. In the present study, 79% of study participants believed that during systemic illness they should not breastfeed the infant, 74% said tension at home can affect milk production and breastfeeding. 72% said that anxiety affects milk production. 63% said soreness, tenderness or pain in nipple can affect breastfeeding. 61% said crèche should be available at work place. 77% said presence of strangers affect breastfeeding.

Table 3: Factors affecting breastfeeding/ Mothers correct answer about breast feeding knowledge

Sl no.	Items	Yes
1	Soreness/tenderness/pain in the nipple of the mother can affect breast feeding	76 (63%)
2	During systemic illness mothers should not breast feed the babies	95 (79%)

3	Anxiety can affect breast feeding and milk production	87 (72%)
4	Tension at home /work place can reduce breast milk and affect breast feeding	89 (74%)
5	Depression & sadness due to family problems does not affect breast feeding	27 (22%)
6	Unfamiliar environment affects breast feeding.	42 (35%)
7	Presence of strangers affect breast feeding.	92 (77%)
8	Baby nursing rooms/ feeding rooms should be available in all work places.	67 (56%)
9	Crèche should be available in all work places	73 (61%)

Table 4 and 5 shows association of age and parity with knowledge of exclusive breast feeding and colostrum. A significant association was seen between age and breastfeeding (p-value 0.003), and also between, age and knowledge of colostrum (p-value 0.002). Association between parity and breastfeeding, and, parity and colostrum was also found to be significant in our study with p-value 0.001 and 0.007 respectively.

Table 4: Association between age and parity with knowledge of exclusive breast feeding

Variable		Exclusive breast feeding		Chi sq value	p-value
		Yes (%)	No (%)		
Age (in years)	18-25	17.5	38.4	8.8	0.003
	26-40	25.8	18.3		
Parity	Nulliparous	12	38.8	17.30	0.001
	Primiparous	12.5	16.7		
	Multiparous	15.8	4.2		

*p-value < 0.05 is significant

Table 5: Association between age and parity with knowledge of colostrum

Variable		Colostrum		Chi sq value	p-value
		Yes (%)	No (%)		
Age (in years)	18-25	14.2	41.7	9.51	0.002
	26-40	23.3	20.8		
Parity	Nulliparous	13.3	37.5	9.79	0.007
	Primiparous	11.7	17.5		
	Multiparous	12.5	7.5		

*p-value < 0.05 is significant

Discussion

Benefits of breastfeeding extend beyond basic nutrition. It has both immunological and anti-inflammatory properties, which protect both mother and infant, against a host of illness and diseases.¹¹ There are a lot of misconceptions, customs and pseudo beliefs regarding breastfeeding practices, which are being followed from generations in many countries. These practices have often affected both the mother and infant. In the present study, we have tried to assess the knowledge and attitude of participants (ante-natal women) of Wayanad district, Kerala. 120 participants were included in this study. 55.8% participants were in the age group 18-25yrs. The mean age of study participant was 25.4 years. 76% of participants did not reveal their employment status. Only 2% of the study participants were working. 50% of the participants were nulliparous.

In this study, we assessed knowledge and attitude

towards exclusive breastfeeding and found that only 43.3% of the study participants knew the importance of breastfeeding. Of them, 56% believes it is very important, whereas 21% believes it is not at all important. Only 37.5% knew about colostrum and 53% of them considers it very beneficial for baby. Victor Mogre et al, in their study found that 58% of the mothers practiced exclusive breastfeeding.⁹ In another study by SB Shetty et al, done in the coastal town of South India, they found that 58.7% knew the importance of breastfeeding.¹² Chaudhary et al in another study reported that only 25% of mothers recognized the importance of colostrum.¹³ In contrast, data in few studies show that the knowledge of mother's about exclusive breastfeeding and colostrum was very high (70-97%) compared to present study.¹⁴⁻¹⁸

The prevalence of exclusive breastfeeding found in the present study is below the WHO recommended prevalence of 90 %.¹⁰ This shows an extensive

difference between the desired and the actual practice of exclusive breastfeeding. The difference could be due to lack of knowledge, social norms, poor family and social support, embarrassment, lactation problems, employment and child care and barriers related to health services.^{19,20} Educating mothers and emphasizing on various advantages of exclusive breastfeeding can help in overcoming this gap of knowledge and practice. Family members, health professionals and media play an important role in spreading awareness and knowledge about exclusive breastfeeding. In the present study, only 41% of participants considered doctors to be the main source of knowledge about breastfeeding, whereas, 54% of participants considered media as the main source.

The attitude of mothers towards breastfeeding revealed that majority of mothers had positive perspective towards breastfeeding. In the present study, 79% of participants said breastfeeding is beneficial to both mother and baby, and 63% said that an infant should be breastfed 10-15 times a day. 93.3% participants considered breast milk healthier than artificial substitute like formula milk, etc. Our result was higher than in the study by Al-Binali et al (36.7%)²¹ and Khamnianet al(31%).²² 79% of participants in our study presume that during systemic illness they should not breastfeed the infant, 74% thought tension at home can affect milk production and breastfeeding, 72% said that anxiety affects milk production, and, 63% said soreness, tenderness or pain in nipple can affect breastfeeding. There are various studies supporting the same views by mother. Similar findings has been reported in many studies.^{23,24} These are negative and unfavorable assumptions, which leads to an abrupt cessation of breastfeeding which can be overcome by continuous health education of mother.²⁴

Another very important social barrier to breastfeeding is employment. Lack of privacy and unsupportive work environments usually lead to early cessation of breastfeeding. 61% of participants in the present study said that crèche should be available at workplace, 56% said baby nursing rooms/ feeding rooms should be available in all workplaces, 35% said unfamiliar environment affects breastfeeding and 77% said that presence of strangers affect breast feeding. Therefore, support in the workplace with little adjustments and rearrangement will make it easier for women employees to continue breastfeeding for the best health interests of mother and child.

The present study reveals, there is a significant association between age and parity with knowledge of exclusive breast feeding and colostrum. 25.8% of women between 26-40yrs knew about exclusive breastfeeding, compared to, 17.5% of women between 18-25 yrs (p-value 0.003). 23.3% of women between 26-40 yrs knew about colostrum, compared to, 14.2% women between 18-25 yrs (p-value 0.002). Similar findings were reported in various studies.²⁵⁻²⁸ We also

found a significant association between parity and breastfeeding, and, parity and colostrum, with p-value 0.001 and 0.007 respectively.

Conclusion

Breastfeeding gives children the healthiest start in life and is one of the simplest, smartest and most cost-effective ways we have of ensuring that all children survive and thrive. Present study showed satisfactory knowledge and attitude of mother's towards exclusive breastfeeding. To further increase the breastfeeding practices, mothers, especially nulliparous and young mothers, should be educated about the benefits and importance of exclusive breast-feeding during their ante-natal visits. The main limitation of the present study is- small sample size. Further studies are needed with larger population.

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