# Knowledge Regarding Breastfeeding amongst ANC Women in Rural Field Practice Area of IIMSR Medical College, Badnapur, Maharashtra, India

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#### Abstract

**Background:** Today many health authorities consider human breast milk the healthiest form of milk for babies. Breastfeeding promotes the health of both the mother and the infant and also helps to prevent disease. Inadequate knowledge of breastfeeding may lead to undesirable consequences.

**Methods:** A cross-sectional study was carried out from July to September 2014 in the field practice area of Dept. of Community Medicine of Indian Institute of Medical Science & Research (IIMSR) Medical College, Badnapur, Jalna, Maharashtra, India. A total of 200 antenatal care women were selected by convenience sampling method.

**Results:** Out of 200 ANC women, 63.5% showed average quality of knowledge about breast feedings. 68.5% participants know that first milk (colostrum) should be given to a newborn. 47% participants know that breastfeeding should be started within one hour after delivery. 59% of participant knows that exclusive breast feeding should be continue up to 6 month and 65.5 % knows that breast feeding should be continue up to two years.

**Conclusions:** The study shows that there is inadequate knowledge regarding breastfeeding amongst ANC women. Hence there are need to improve the level of knowledge about breast feeding among ANC women.

Keywords: Antenatal care, Breastfeeding, Knowledge, Rural India



## Introduction

Breastfeeding and weaning of an infant are not only crucial for optimal growth and development but also are important determinants of future physical and mental well-being because of the rapid growth spurt and development of organs and tissues during the first year of life.<sup>[1]</sup> The importance of breastfeeding has been emphasized in various studies<sup>[2,3]</sup> and so also the imperative role of exclusive breastfeeding to an infant and the immunological and nutritional values of breast milk.[4,5] These practices play an important role in reducing child mortality and morbidity; however it may vary among different regions and communities In India, breastfeeding in rural areas appears to be shaped by the beliefs of a community, which are further influenced by social, cultural, and economic factors. Malnutrition is often associated with inappropriate feeding practices. [6] Breastfeeding plays an important role in improving infant and child morbidity and mortality. The World Health Organization (WHO) and United Nations Children's Fund (UNICEF) recommend that every

infant should be exclusively breastfed for the first six months of life and breastfeeding should be continue for up to two years of age.<sup>[7-9]</sup> WHO also recommends early (within one hour of giving birth) initiation of breastfeeding. In developing countries alone, early initiation of breastfeeding could save as many as 1.45 million lives each year by reducing deaths mainly due to diarrheal disorders and lower respiratory tract infections in children.<sup>[10]</sup> Hence the present study was carried out to assess the knowledge about breastfeeding amongst ANC women in rural area.

#### Materials and Methods

A cross-sectional study was carried out over a period of three months from July to September 2014 in the field practice area (Kasturwadi Rural Health Training Centre) of Dept. of Community Medicine of Indian Institute of Medical Science & Research (IIMSR) Medical College, Badnapur, Maharashtra, India. A total of 200 antenatal care women were selected by convenience sampling method. A pre-designed, pre-tested, self-administered questionnaire in local language Marathi was devised to collect data. Questionnaire consists of knowledge on breastfeeding was assessed through 6 questions. Each correct answer was given one score, and the range of the score varied between 0 (with no correct answer) to 6 (for all correct answers). A scoring mechanism was used to understand overall knowledge level; a score of one has given for each correct response and zero for wrong response. Respondents with all correct response get a maximum of 6 points; higher points indicate good knowledge. Based on total score, knowledge level on breastfeeding was categorized into poor ( $\leq$  2 points), average (3-4 points), and good ( $\geq$ 5 points). The participation to study was on voluntary basis. All participants were given a briefing about objective of the study and were assured confidentiality in collection of personal data. Institutional ethical committee approval was obtained for the study. Data was entered in MS Excel and analyzed by using Statistical Package of Social Sciences (SPSS) version-13.0. Statistical significance was set at  $P \leq 0.05$ 

#### Results

The study participants were ranged from 19 years to 35 year, the mean  $\pm$  SD of age of the participants was  $22.5 \pm 3.14$  year.

**Table 1:** Shows 11.5% of participant were illiterate, 59.5% completed SSC but only 10.5% participants completed their higher schooling education. About participant's husbands were 5.5% illiterate, 52%

completed SSC and 20.5% completed higher secondary education. About 63.5% of participant's husbands were farmer by occupation.

**Table 2** reveals that among the study participants, 63.5% participants had average knowledge about the breastfeeding.

**Table 3:** Showed that 68.5% participants know that first milk (colostrum) should be given to a newborn. 47% participants know that breastfeeding should be started within one hour after delivery. 59% of participant knows that exclusive breast feeding should be continue up to 6 month and 65.5% knows that breast feeding should be continue up to two years. 55% participant agreed about the two hourly breast feeding and 54% about withholding prelacteal feed.

**Table 4:** Shows association among the sociodemographic variables and knowledge of breastfeeding among the participants, where we found that participant's (ANC women) and her husband's education positively associated with breastfeeding knowledge of participant's p<0.011, and p<0.035 respectively.

Table 1: Socio-demographic characteristics of the study population

Category	Frequency	Percent (%)
-	Age (yr.)	
≤ 25	176	88%
26-35	24	12%
•	Education	
Illiterate	23	11.5%
Primary & Secondary	33	16.5%
SSC	119	59.5%
HSC	21	10.5%
Graduate	4	2%
•	Husbands Education	
Illiterate	11	5.5%
Primary & Secondary	28	14%
SSC	104	52%
HSC	41	20.5%
Graduate	16	8.0%
	Husband's occupation	
Farmer	127	63.5%
Service	25	12.5%
Business	15	7.5%
others	33	16.5%

Table 2: Knowledge regarding Breastfeeding among ANC Mothers

Category	Knowledge Score	Frequency	Percentage
Poor	1-2	42	21.0
Average	3-4	127	63.5
Good	5-6	31	15.5

Table 3: Knowledge regarding breastfeeding amongst respondents

First Milk (Colostrums) should	be given to a newborn	
Yes	137	68.5%
No	63	31.5%
When breastfeeding should be s	tarted	
≤ 1 Hrs	94	47%
>1 Hrs	106	53%
<b>Exclusive breastfeeding should</b>	be continue up to 6 month	
Yes	118	59%
No	82	41 %
Breastfeeding continue upto 2 y	ears	
Yes	131	65.5%
No	69	34.5%
Prelacteal food should not be gi	ven to a new born	
Yes	108	54%
No	92	46%
Breast feeding should be given of	on demand to a new born	
Yes	110	55%
No	90	45%

Table 4: Association between socio-demographic variables and knowledge score on breastfeeding

Category	Poor	Average	Good	χ2- value	P-value			
Age (yr.)								
≤ 25	36(18%)	111 (55.5%)	29(14.5%)	1.154	0.561			
26-35	6(3%)	16(8%)	2(1%)					
	Education							
Illiterate	9(4.5%)	10(5%)	4(2%)	19.9	0.011			
Primary &	6(3%)	21(10.5%)	6(3%)					
Secondary								
SSC	19(9.5%)	87(43.5%)	13(6.5%)					
HSC	6(3%)	8(4%)	7(3.5%)	]				
Graduate	2(1%)	1(0.5%)	1(0.5%)	]				
	Husbands Education							
Illiterate	4(2%)	5(2.5%)	2(1%)	16.6	0.035			
Primary& Secondary	9(4.5%)	14(7%)	5(2.5%)	]				
SSC	17(8.5%)	78(39%)	9(4.5%)	]				
HSC	9(4.5%)	22(11%)	10(5%)	]				
Graduate	3(1.5%)	8(4%)	5(2.5%)	]				
Husband's occupation								
Farmer	23(11.5%)	80(40%)	24(12%)	6.290	0.391			
Service	8(4%)	15(7.5%)	2(1%)	]				
Business	5(2.5%)	9(4.5%)	1(0.5%)	]				
Others	6(3%)	23(11.5%)	4 (2%)					

### Discussion

Antenatal sensitization has an effective impact over exclusive breastfeeding. The quality of knowledge and support has a crucial role in success of breast-feeding promotion. [11] In our study, the average knowledge of breastfeeding among participants was found to be 63.5% which coincides with Mohite RV et al. [12] and Kishore SS et al. [13] who found that the average breastfeeding knowledge among ANC was 59.6% and 60% respectively, this will increase if level of higher

education and above level of education will increase among the ANC mothers. Our study shows a significant association of participant and their husband's level of educational status and knowledge of breastfeeding among the participants, as education is one of the tool to become knowledgeable. If a woman is literate she comes to know by the process of education about the importance of breast feeding subsequently its application will follow. Similar results were found by Giugliani ER et al.<sup>[14]</sup> and Yusra A & Al-Hially.<sup>[15]</sup> The

present study reveals that 54% of participants knew that no prelacteal food should be given to a new born, similarly study done by Mohite RV et al.<sup>[12]</sup> and Borade A et al.<sup>[16]</sup> found 54% and 56.6% of participant had knowledge regarding the prelacteal food respectively. It suggests that more IEC activities regarding the prelacteal food are mandatory.

In our study, 68.5% of participants knew about the importance of first milk (colostrum) and it should not be discarded, similar findings were also showed Mohite RV et al.<sup>[12]</sup> and Borade A et al.<sup>[16]</sup> where 72.2% and 77.7% of participants know about the importance of first milk (colostrum) respectively. However, Garg R et al.<sup>[17]</sup>, found that the knowledge about colostrums was 35.6% among participants of their study which might be linked with educational status of study participants and low intensification of IEC activities by government and non-government agencies regarding the importance of first milk (colostrum).

In this study, 59% of participants perceives that exclusive breast feeding should be continue till 6 months of a newborn, Lauer JA et al.<sup>[10]</sup> also found that 73.3% of participants knew about exclusive breast feeding should be continue till 6 months of a newborn. Mohite RV et al.<sup>[12]</sup> and Borade A et al.<sup>[16]</sup> also showed the knowledge of exclusive breast feeding among participants was 57.2% and 48.6% respectively.

#### Conclusions

The critical window of the first five years of life highlights the importance of appropriate feeding and weaning practices in infants and toddlers. For the most problems related to malnutrition in children there is need to create awareness in rural mothers to promote healthy feeding practices and impart nutrition education to prepare low cost locally available food. The knowledge regarding the breast feeding is not solely depends on level of formal education but also on informal education, where the role of government and non-government agencies is more important.

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**Conflicts of Interested: Nil** 

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### References

- Waterlow JC, editor (1992). Protein energy malnutrition. London: Edward Arnold.1992.
- Iskandar MB, Costello C, Nasution Y. Initiation and Duration of Breast feeding in Indonesia. Asia Pac Popul J 1990;5:89-112.
- Bautista LE. Factors associated with initiation of breast feeding in the domician Republic. Rev Panam Salud Publica 1997;1:200-7.
- Arifeen S, Black RE, Antelman G, Baqui A, Caulfield L, Becker S. Exclusive breast-feeding reduces acute respiratory infection and diarrhea deaths among infants in Dhaka slums. Pediatrics 2001;108:E67.
- Dewey KG, Cohen RJ, Brown KH, Rivera LL. Effects of exclusive breast-feeding for four versus six months on maternal nutritional status and infant motor development: Results of two randomized trials in Honduras. J Nutr 2001:131:262-7.
- Deshpande JD, Giri PA, Phalke DB, Phalke VD, Kalakoti P, Syed MMA. Socio-cultural practices in relation to breastfeeding, weaning and child rearing among Indian mothers and assessment of nutritional status of children under five in rural India. AMJ 2010;3(9):618-624.
- James DCS, Lessen R. Position of American Dietetic Association: Promoting and supporting breastfeeding. J Am Diet Assoc 2009,109(11):1926–1942.
- Global Strategy for Infant and Young Child Feeding [internet]. Geneva, Switzerland: World Health Organization; [Updated 2002 May 18].
- World Health Organization (2003); Community-Based Strategies for Breastfeeding Promotion and Support in Developing Countries. Geneva, Switzerland: World Health Organization; 2003.
- Lauer JA, Betran AP, Barros AJ, de Onis M. Deaths and years of life lost due to suboptimal breast-feeding among children in the developing world: a global ecological risk assessment. Public Health Nutrition 2006;9:673-685.
- 11. Mathai J. the Brazilians national breast-feeding programme. Assign child 1983;6:225-45.
- Mohite RV, Mohite VR, Kakade SV. Knowledge of breast feeding among primigravida mothers. Bangladesh Journal of Medical Science 2012;11(4):312-16.
- 13. Kishore SS et al. Breast feeding knowledge and practice among mothers in a rural population in India: community based survey. Journal of tropical pediatrics 2000;55(3):183-188.
- 14. Giuliani ER, Bronner Y, Caiaffa WT, Vogelhut J, Witter FR, Perman JA. Are fathers prepared to encourage their partners to breast feed? A study about father's knowledge of breastfeeding. Acta Paediatr. 1994;83:1127-31.
- Yusra A. Al-Hially, Assessment of mothers' knowledge about breast-feeding and determining Predictors, Tikrit Medical Journal 2010;16(2):77-83.
- Borade A, Hanumante N. Maternal knowledge and participation about breast-feeding and factors influencing it. J Ped child health care 2008;5(3):27-32.
- Garg R. Deepti S, Padda A. Singh T. Breast feeding knowledge and practices among rural women of Punjab, India: a community based study. Breast feed Med. 2010;5(6):303-07.