

# KAP STUDY OF FACTORS PROMOTING BREASTFEEDING IN NURSING MOTHERS AND PREGNANT WOMEN

Sharanya B. Shetty<sup>1</sup> & Sudarshan Shetty K<sup>2</sup>

<sup>1</sup>MBBS Student, <sup>2</sup>Associate Professor, Department of Paediatrics  
K. S. Hegde Medical Academy, Nitte University, Deralakatte, Mangalore – 575018

Correspondence

Sudarshan Shetty K.

Associate Professor, Department of Paediatrics, K.S. Hegde Medical Academy, University Road, Deralakatte, Mangalore - 575 018, Karnataka State, INDIA. Phone : +91 824 2204476, Fax : +91 824 2204162, E-mail : sudarshanshetty1975@gmail.com

## Abstract:

**Background:** Breastfeeding is known to be central in an infant's nutrition and growth worldwide. Fewer mothers offer breast milk in this crucial period due to various misconceptions and cultural beliefs. Our objective was to assess the knowledge, attitude and practice of breast feeding and identify misconceptions regarding breast feeding practices in suburban south Indian town.

**Methodology:** Observational study conducted in a tertiary teaching hospital of coastal south India. A total of 300 subjects including pregnant and nursing mothers attending the outpatient departments were recruited. Subjects were briefed orally, consent taken and a structured questionnaire administered by a single observer. Mothers who were unable to breast feed due to medical contraindications were excluded. The data was analysed using SPSS software. Univariate and binary regression analyses were performed for associations.

**Results:** Among the subjects 36% had primary education and 12% were graduates. Majority (61%) lived in a joint family. Only 52.3% of the subjects received advice on breastfeeding during antenatal visits, out of which only 19.3% had a breast examination. 58.7% knew that breastfeeding should be initiated within 1 hour of child birth but only 48% of the mothers who had delivered initiated breastfeeding within 1 hour. 71.6% of the mothers knew that exclusive breastfeeding should be practised for 6 months. On univariate analysis mothers with more than 1 child, vaginal delivery and an educated partner had awareness of breastfeeding and practiced healthy breastfeeding.

**Conclusion:** Our study emphasises the need to counsel mothers regarding breastfeeding practices early during antenatal visits and not postpone till after delivery, include the spouse for support, sensitise the health care giver and improve infrastructure for a successful breastfeeding initiation.

**Keywords:** breastfeeding practices, breastfeeding misconceptions

## Background:

Breast milk provides nutritive and immunological protection in infants to ensure health and survival. It is known to prevent adult onset disease like coronary artery disease, diabetes and hypertension.<sup>[1]</sup> Most under-five deaths in developing country like India can be prevented by early initiation of breastfeeding and exclusive breastfeeding up to 6 months of age.<sup>[2]</sup> According to the

WHO recommendations, 3 factors are needed to reduce infant mortality rates, namely initiation of breast feeding within 1 hour of birth, practicing exclusive breastfeeding for 6 months and proper

supplementation at 6 months. But misconceptions among mothers have made it difficult to execute the same at the community level.<sup>[3]</sup> Issues like career, easily available and aggressively promoted formula based feeds, social pressures and illness among the lactating mothers have further lowered breastfeeding rates.<sup>[4]</sup> Globally less than 40% of infants under the age of six months are exclusively breastfed.<sup>[2]</sup> Though the ideal time to educate the women about the merits of breast feeding is before pregnancy, few receive counselling during pregnancy and many after failed lactation.<sup>[5]</sup> This has led to an increased burden on the health care providers to restart breast feeding and manage an undernourished newborn. A stronger educational awareness program to prepare the young mothers for a successful lactation will reduce the cost on health care programs.<sup>[6]</sup> We conducted this study in a suburban coastal

Access this article online

Quick Response Code



town of south India where female literacy is above the national average to assess the knowledge, attitude and practice of breast feeding and identify the misconceptions among mothers regarding breast feeding practices. As the centre is a tertiary referral centre we could assess women of different social strata but with similar cultural background.

#### Methodology:

This was an observational study conducted in a tertiary care teaching centre from May to August, 2012. Pregnant women and nursing mothers attending the outpatient departments of obstetrics and paediatrics were recruited in the study. Subjects were explained orally about the study and the consent taken. The data collection and educational counselling was done by a single observer. The data was collected by a pre-evaluated questionnaire printed in English or local language. At the end of the interview mothers were given an educational handout about breast feeding. Pregnant and lactating mothers of all ages, nursing mothers practicing breastfeeding and mothers who bottle feed their infants were included and all mothers who were unable to breast feed their baby due to medical contraindications like HIV, hepatitis or any other illness were excluded. The data was analysed using SPSS software. Frequencies and descriptive summary statistics were performed to describe the sample. Univariate and binary regression analyses were performed to assess the associations.

#### Results:

A total of 300 subjects were included in the study. Their age ranged from 19 to 42 years. All the subjects were married, 36% had primary education and 12% were graduates. Religion wise, 69.3% were Hindus, 26% were Muslims and 4% were Christians and majority of the subjects lived in a joint family (61%). In the study group, 31.3% of the subjects were pregnant and 68.6% were lactating mothers. Only 52.3% of the subjects had received advice on breastfeeding during their antenatal visit, out of which only 19.3% of the subjects had a breast examination. 82% of the subjects believed that they should give colostrums to the newborn.

58.7% of the subjects knew that breastfeeding should be initiated within 1 hour of the child birth, but only 48% of the mothers who had delivered initiated breastfeeding within 1 hour. 71.6% of the mothers knew that exclusive breastfeeding should be practised for 6 months. The scoring was marked such that maximum scored for positive responses and minimum for negative responses. Knowledge of the mothers in various aspects of breast-feeding was analyzed as shown in Table. On univariate analysis mothers with more than 2 children, delivery by normal vaginal labour had better knowledge of healthy breastfeeding practices. Women with a better educated partner practiced healthy breastfeeding. In our study we found that mother's education or the religion she practiced or sex of the child had no role in practicing healthy breastfeeding. On binary regression analysis we found that mothers undergoing vaginal labour and new mothers had lower awareness and practice of breastfeeding compared to mothers with more than 1 child.

#### Discussion:

Advice on breastfeeding should be initiated for all mothers during the antenatal visits, as the mother is more receptive during her pregnancy and has good interaction with the health care provider. Routine examination of the mother should include examination of the breasts for inverted nipples, flattened nipples and followed by breastfeeding counselling. However in our study only 52.3% had received any advice on breastfeeding practise, 82.7% of the mothers knew that colostrums should be given to the child. Although 58.7% of mothers knew that breastfeeding should be initiated within 1 hour, only 48.5% of the mothers who had already delivered had actually done so. Various Indian studies have noted higher knowledge about early initiation of breastfeeding ranging from 87- 92% but breastfeeding initiation varied from a low 6% to 36%.<sup>[7,8,9,10]</sup> These studies stress the need to support the mother for initiation of breastfeeding immediately after birth. One of the reasons noted in these studies were mothers who had c-section deliveries breastfed their babies much later than the mothers who had normal delivery. This was seen in our group with mothers delivering per vaginally breastfeeding

earlier compared to the c section group. The other reason observed was that babies who were sick were kept in the intensive care units which delayed early initiation of breastfeeding.<sup>[11,12]</sup> Thus infrastructural plans must be worked out keeping the lactating mothers in mind to support early initiation, like rooming in facilities in the labour theatres, ability to breastfeed after c- section. The health care providers also need to be trained to encourage breastfeeding whenever they get the opportunity to interact with the mothers.

It is recommended by WHO that exclusive breastfeeding should be practised for 6 months. In our study 71.6% of the mothers knew that exclusive breastfeeding must be practised for 6 months but among the multiparous lactating mothers only 18% practiced exclusive breastfeeding. A study from Nepal noted higher practice of exclusive breastfeeding when the mothers lived in

extended families probably due to better family support.<sup>[13]</sup>

On the contrary in our study mothers living in unit family (39%) practiced exclusive breastfeeding more than those living in joint families. Thus support from the family especially the spouse is needed for successful practice of breastfeeding initiation and exclusive breastfeeding for 6 months.

In our study it was seen that father's education had a significant role in breastfeeding practices. Surprisingly mother's education had no significant role in early initiation of breastfeeding or colostrums feeding. In two similar international studies<sup>[14, 15]</sup> from China and Bangladesh respectively a similar correlation was highlighted. In our factors like age of the mother, age at marriage, mother's education and religion, type of the family and the sex of the child had no role in knowledge on breastfeeding.

Table: Factors affecting mother's knowledge of breastfeeding

		Poor knowledge (<10)	%	Good knowledge (> 10)	%	p-value
Education status of the mother	<7 <sup>th</sup> std	59	54.6	49	45.3	0.342
	7 <sup>th</sup> -10 <sup>th</sup> std	72	66.6	36	33.3	
	PUC	29	60.4	19	39.5	
	>PUC	21	58.3	15	41.6	
Religion	Hindu	130	62.5	78	37.5	0.509
	Muslim	43	55.1	35	44.8	
	Christian	8	60.3	6	39.6	
Type of family	Unit family	65	55.5	52	44.4	0.109
	Joint family	116	63.3	67	36.6	
Pregnancy	Pregnant	64	68.1	30	31.9	0.041*
	Not pregnant	117	56.8	89	43.2	
Number of children	0	51	69.7	22	30.3	0.005*
	< or = 2	124	60	83	40	
	>2children	6	30	14	70	
Sex of the child	Not born/pregnant mother	51	70	22	30	0.135
	Male	84	58.8	59	41.2	
	Female	46	54.8	38	45.2	
Mode of delivery	Pregnant mother	51	69.9	22	30.1	0.036*
	Vaginal	67	52.3	61	47.6	
	C-section	63	63.3	36	36.3	
Education status of father	<7 <sup>th</sup> std	41	48.8	43	51.1	0.008*
	7 <sup>th</sup> -10 <sup>th</sup> std	94	70.6	39	29.3	
	PUC	16	51.6	15	48.3	
	>PUC	30	57.6	22	42.3	

\*indicates significance (p <0.05)

### Conclusions:

In our study we found that the mothers nursing in unit families can successfully breastfeed with the support of their partners. The need of the hour is to educate our health care personnel about the importance of providing breastfeeding counselling to mothers whenever they get the opportunity, especially during the antenatal visits. It also needs to be noted that knowledge alone is not going to determine successful breastfeeding practice, but

sensitization of the health care provider and the infrastructural amendments are needed for early initiation of breastfeeding in a hospital background.

### Acknowledgment:

This study was completed with the funding from ICMR Student Short Term project of India. The ICMR has no role other than funding.

### References:

1. Smith JP, Harvey PJ: Chronic disease and infant nutrition: is it significant to public health. *Public Health Nutr* 2011;14:279-8
2. World Health Organisation: [www.who.int/features/factfiles/breastfeeding/en/index.html](http://www.who.int/features/factfiles/breastfeeding/en/index.html) (accessed on 9/9/2012)
3. Qianling Zhou, Katherine M Younger, John M Kearney: An exploration of the knowledge and attitudes towards breastfeeding among a sample of Chinese mothers in Ireland. *BMC Public Health* 2010, 10:72
4. Rajesh Garg, Shyam Sunder, Deepti, Avtar Padda, and Tejbir Singh: Breastfeeding Knowledge and Practices Among Rural Women of Punjab, India: A Community-Based Study. *Breastfeeding Medicine*: December 2010, 5: 303-307.
5. Chaturvedi P, Banait N: Knowledge and attitude regarding breastfeeding, in mothers attending antenatal clinics. *Indian J Pediatr* 2000;67:259-62
6. Thomas M. Ball, MD, MPH, and Anne L. Wright: Health Care Costs of Formula-feeding in the First Year of Life. *Pediatrics* 1999;103:870
7. Maheswari Ekambaram, Vishnu Bhat B, Mohamed Asif Padiyath Ahamed: Knowledge, attitude and practice of breastfeeding among postnatal mothers. *Curr Pediatr Res* 2010; 14 (2): 119-124
8. Gunasekaran Dhandapany, Adhisivam Bethou, Arulkumaran Arunagirinathan and Shanthy Ananthakrishnan: Antenatal counselling on breastfeeding – is it adequate A descriptive study from Pondicherry, India. *Int Breastfeeding Journal* 2008;3:5 doi:10.1186/1746-4358-3
9. N. Pandit, M. Yeshwanth, Sr. Ida Albuquerque: Factors influencing initiation of breastfeeding in an urban set up. *Indian Pediatr* 1994; 31(12):1558-60
10. I. A. Ekanem, A. P. Ekanem, A. Asuquo, V. O. Eyo: Attitude of working mothers to exclusive breastfeeding in Calabar municipality, Cross River State, Nigeria. *Journal of Food Research* 2012; 1(No. 2):71
11. Ali M Al-Binali: Breastfeeding knowledge, attitude and practice among school teachers in Abha female educational district, southwestern Saudi Arabia. *International Breastfeeding Journal* 2012, 7:10
12. RN Chaudhary, T Shah, S Raja: Knowledge and practice of mothers regarding breast feeding: a hospital based study. *Knowledge & practice in breast feeding* 2011; 9 (No.3):194-200
13. Joshi S, Barakoti B, Lamsal S: Colostrum Feeding: Knowledge, Attitude and Practice in Pregnant Women in a Teaching Hospital in Nepal. *International Journal of Medicine and Molecular Medicine* 2012;3(8):WMC003601
14. EYL Leung, KYA Au, SSW Cheng, SY Kok, HK Lui, WCW Wong: Practice of breastfeeding and factors that affect breastfeeding in Hong Kong. *Hong Kong Med J* 2006;12:432-633
15. S.S. Hasnin, S.M. Barua, and M.S. Islam: Effects of Education Level of Father and Mother on perception of breastfeeding. 8<sup>th</sup> Common wealth Congress on Diarrhoea and Malnutrition; 2006; ICDDR,B, Dhaka, Bangladesh. P.190