## **Original Research Article**

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20182182

# Factors influencing perception and knowledge of exclusive breast feeding practices among nursing mothers in rural area of Thane district of Mumbai

Abhay S. Srivastava<sup>1</sup>, Kanchan B. Gawande<sup>2</sup>\*

Department of Community Medicine, <sup>1</sup>Government Medical College, Aurangabad, <sup>2</sup>Indira Gandhi Government Medical College, Nagpur, Maharashtra, India

Received: 24 March 2018 Revised: 08 May 2018 Accepted: 09 May 2018

### \*Correspondence:

Dr. Kanchan B. Gawande,

E-mail: gawandekb.05@gmail.com

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

#### **ABSTRACT**

**Background:** Exclusive breastfeeding (EBF) is recommended as the best feeding alternative for infants up to six months and has a protective effect against mortality and morbidity. Exclusive breastfeeding (EBF) is one of the optimal infant and young child feeding practices. Globally, <40% of infants under 6 months of age are exclusively breastfed. According to NFHS4 data (2015-16) the prevalence of EBF in the rural area of Maharashtra was 60.6% which was far less than the 100% recommended by the United Nation Children Emergency Fund. Study was conducted to find the mothers knowledge and perception on breast feeding practices and other factors which influences breast feeding practices in the study area

**Methods:** A cross sectional descriptive study was employed. From the population of 8000, by applying convenient sampling technique, 152 mothers attending the primary health centre with children less than 2 years of age were enrolled after taking informed consent.

**Results:** The prevalence of exclusive breast feeding was 63.15%. There was a significant association between sociodemographic characteristics of mothers such as occupation (p<0.05), type of family (p<0.05) and the practice of exclusive breastfeeding.

**Conclusions:** As it was found that exclusive breast feeding was practiced well by mothers who were housewives which shows that employment was the major obstacles for breast feeding.

**Keywords:** Exclusive breast feeding, Primigravida, Nursing mothers

#### INTRODUCTION

Proper feeding practices are of significant importance for the growth, development, health, nutrition and survival of infants and children. Nurturing practices adopted by the family will decide the health of the baby after birth. Risk of acquiring an illness increases if the child is fed poorly. Early nutrition deficits are also linked to long term impairment in growth and health, which is directly or indirectly responsible for one third of approximately 9.5

million deaths that occurred in 2006 in children under 5 years of age.

Based on data from WHO it has been shown beyond doubt that breastfeeding has well established short term benefits, particularly in scaling down of morbidity and mortality due to childhood infections in first two years of life. Optimal breastfeeding practices could prevent hospital admissions due to diarrhoea and lower respiratory tract infections. Systematic review from

WHO on long term benefits of breastfeeding suggest a preventive effect on blood pressure related problems, substantial protection (34% reduction) from diabetes, 24% reduction in overweight and/or obesity. Breastfeeding was also associated with an overall increase of intelligence score.<sup>2</sup>

India falls short to achieve any exceptional progress in infant feeding practices, with only a slight increment in EBF rates amongst infants 0-6 months of age – From 41.2% in 1998-1999(NFHS-2) to 46.3% in 2005-2006 (NFHS-3) to 46% in 2015-2016 (NFHS-4).<sup>3</sup>

Various factors affect breastfeeding practices in India which can be classified into five groups viz Health care related, socio-demographic, psychosocial, community and policy related. Insufficient milk production, higher socio economic status, influence of paternal education and maternal employment are some of the commonest reasons for shorter duration of breastfeeding.

The present study was conducted for assessment of knowledge and perception of breast feeding practices among nursing mothers and to find factors which influence breast feeding practices in the study area.

#### **METHODS**

The study employed descriptive cross-sectional method, conducted over a period of 4 months from March 2017 to June 2017. The study population was nursing mothers with children less than 2 years of age residing in the villages under field practice area in Thane district of Mumbai. The inclusion and exclusion criteria for selected participants were; biological mothers with babies less than 2 years who reside in study area and showed interest in participating were recruited. In terms of exclusion criteria, primigravida or married female who don't have even a single baby or mothers with children more than 2 years of age were excluded from the study.

There are 29 villages under the field practice area of the centre, which constitute population of approximately 8000, nursing mothers within the study area who had attended the primary health centre for any health related services were interviewed with structured questionnaire. Depending upon the inclusion and exclusion criteria 152 such mothers were interviewed and enrolled in the study. The essence of the study was explained to participants using an information sheet. Informed consent was taken before enrolment of the subjects.

Data was collected regarding sociodemographic factors, knowledge and perception of mothers about breast feeding practices. Data were analysed using frequency and chi-square tables. Statistical significance for all testing was set as 0.05.

#### **RESULTS**

In Table 1, maximum (87.50%) numbers of respondents were in the age group of 21 to 30 years of age. 86.85% were Hindu by religion. 88.82% of respondents married at or after 18 years of age. 77.63% of mothers had 1 to 3 ANC visits. 13.81% were illiterate while 48.06% were educated up to secondary level. Maximum (75.79%) respondents were housewife and belong to nuclear family (55.93%). 35.52% of respondent belongs to lower middle class of socioeconomic status.

Table 1: Socio-demographic characteristics of participants.

Variables	Frequency (n=152)	Percent (%)
Age (years)		
21 to 30	133	87.50
31 to 40	19	12.50
Religion		
Hindu	132	86.85
Muslim	20	13.15
Age at marriage		
<18	17	11.18
≥18	135	88.82
No. of ANC visits		
1 to 3	118	77.63
4 to 6	29	19.07
>6	5	03.30
Educational status		
Illiterate	21	13.81
Primary	54	35.52
Secondary	73	48.06
Higher secondary and above	4	02.63
Occupation		
Housewife	114	75.79
Semi-skilled worker	09	05.92
Skilled worker	09	05.92
Unskilled worker	11	07.23
Clerk, shop owner, farm owner	09	05.92
Professional	00	00.00
Type of family		
Nuclear	85	55.93
Joint	64	42.10
Extended	3	01.97
Socioeconomic class		
Upper class	1	00.65
Upper middle class	47	30.92
Middle class	38	25.00
Lower middle class	54	35.52
Lower class	12	07.89

In Table 2, the prevalence of exclusive breast feeding is 63.15%. Almost equal proportion of mothers in both the

age group practiced exclusive breast feeding and there is no significant difference between two groups (p>0.05). 67.12% of mothers educated up to secondary level and 75% of mothers educated up to higher secondary and above level were practicing exclusive breast feeding.

71.05% of housewives practiced exclusive breast feeding. 76% of mothers from joint family practiced exclusive breast feeding. 74.46% of mothers from upper middle class practiced exclusive breast feeding.

Table 2: Relationship between socio-demographic factors and exclusive breastfeeding.

Characteristics	Practiced exlcusive breast feeding (n=152)		u2 (n volus)
	Yes n (%)	No n (%)	χ2 (p value)
Age (years)			
21 to 30	84 (63.15)	49 (36.85)	0.0646 (>0.05)
31 to 40	12 (63.15)	7 (36.85)	
<b>Educational status</b>			
Illiterate	9 (42.85)	12 (57.15)	
Primary	35 (64.81)	19 (35.18)	5 774 (> 0.05)
Secondary	49 (67.12)	24 (32.87)	5.774 (>0.05)
Higher secondary and above	3 (75.00)	1 (25.00)	
Occupation			
Housewife	81 (71.05)	33 (28.95)	
Semi-skilled worker	3 (33.34)	6 (66.66)	
Skilled worker	5 (55.56)	4 (44.44)	9.12 (<0.05)
Unskilled worker	6 (54.54)	5 (45.45)	
Clerk, shop owner, farm owner	1 (11.11)	8 (88.89	
Professional	0 (00.00)	0 (00.00)	
Type of family			
Nuclear	47 (55.29)	38 (44.71)	6.214 (<0.05)
Joint	48 (76.00)	16 (25.00)	
Extended	1 (33.33)	2 (66.66)	
Socioeconomic class			•
Upper class	1 (100.00)	0 (00.00)	3.692(>0.05)
Upper middle class	35 (74.46)	12 (25.54)	
Middle class	21 (55.26)	17 (44.73)	
Lower middle class	32 (59.25)	22 (40.74)	
Lower class	7 (58.33)	5 (41.66)	

Table 3: Mothers knowledge and perception about breast feeding practices.

Variables	Frequency (n=152)	Percent (%)
Reasons for delay in initiation of BF		
Religious misbelieves	27	17.78
No milk secretion	35	23.02
Physical discomfort/drowsiness	36	23.68
Pre-lacteal feed used	54	35.52
Reasons for not feeding colostrum		
Religious reasons	34	22.36
Advice from elderly	31	20.39
Considered bad	29	19.07
Child cannot suck	30	19.73
Others	28	18.42
Prevalent pre-lacteal feeding practices in study area		
Honey	79	51.97
Jaggery water	22	14.47
Ghee	13	08.56
Sugar water	38	25.00

Continued.

Variables	Frequency (n=152)	Percent (%)
Knowledge of benefits of breast milk		
Nutritious	71	46.72
Prevents Infection	38	25.00
Increases bonding	16	10.52
Lactational amenorrhea	04	02.63
Don't know	23	15.13
Source of information about breast feeding		
Elderly female in the family	38	25.00
Doctor	34	22.36
Nurse	24	15.78
Others	57	37.56

In Table 3, an equal proportion of mothers i.e. 23% delayed initiation of breast feeding due to either no milk secretion or physical discomfort. 19.07% of mothers were not feeding colostrum because they considered it bad while in 19.73% of mothers child was not able to suck. 51.97% of mothers were giving honey and 25% of mothers used sugar water as pre-lacteal feed. 46.72% of mothers had knowledge that breast milk is nutritious food for child. 25% of mothers got the information regarding breast milk from the elderly female in the family while 37.56% of mothers received this information from other sources which included friends, neighbours, close and distant relatives and other health personnel like ASHA and AWW.

#### **DISCUSSION**

The overall prevalence of exclusive breast feeding in the present study was 63.15% which was comparable with the result from the previous studies from Ethiopia (70.5%).<sup>4</sup> The study carried out by Radhakrishnan among rural women of Tamilnadu, found the prevalence of exclusive breast feeding was only 34%.<sup>5</sup> While in the study carried out in Taif city of Sudan the prevalence of EBF was only 19%.<sup>6</sup>

The majority of (87.50%) participants were in the age group of 21 to 30 years, belonging to nuclear family (55.93%) and studies up to secondary level (48.06%). Similar results were obtained from the study carried out by Wagh in Akola district of Maharashtra where maximum were in the age group of 24 to 29 years (51.21%), 62.20% of participants belongs to nuclear family and 50% of participants were studies up to secondary level.<sup>7</sup>

Maximum participants belongs to Hindu religion (86.85%), and 75.79% of participants were housewives by occupation. While in the study carried out by Wagh in Akola district of Maharashtra, 32.92% of participants were Hindu by religion and 62.20% were housewives by occupation.<sup>7</sup>

35.52% of respondent belongs to lower middle class of socioeconomic status.

The proportion of women practicing exclusive breast feeding was equal for the both the age group i.e. 63.15%. 67.12% of participant who were studied up to secondary level practiced exclusive breast feeding. There is an inverse relation between education status breast feeding practices. The relation between education and exclusive breast feeding practices was not statistically significant (p>0.05). Similar results were found in the study carried out by Yadavannavar among the rural women of Bijapur, Karnataka were breast feeding practices decrease with increased in educational status of women.8 71.05% of women who were housewives practiced exclusive breast feeding while women who involved in some kind of work show significantly lower percentage of practicing EBF. 76% of women from joint family practiced exclusive breast feeding. Exclusive breast feeding were practiced maximally by women belonging to upper and upper middle class of socioeconomic status while the proportion was low among middle, lower middle and lower class of socioeconomic status. The relation between socioeconomic status and exclusive breast feeding practices was not statistically significant (p>0.05). In the study by Yadavannavar among the rural women of Bijapur, Karnataka, 100% of women from upper and upper middle class of socioeconomic status practiced exclusive breast feeding while the proportion was low among middle, lower middle and lower class which are the similar to the present study.8

Almost equal proportion of women i.e. 23% delayed initiating breast feeding because of physical discomfort and there was no milk secretion to mother. 22% and 20.39% of mothers did not feed colostrum to their babies due to religious reason and due to advice from an elderly person in the family. While 19.07% of mothers think colostrum to be bad for babies' health. Honey was the prevalent pre-lacteal feed used by 51.97% of mothers followed by sugar water which was used by 25% of mothers. In the study by Yadavannavar among the rural women of Bijapur, Karnataka, 46.81% of mothers used sugar water as the most prevalent pre-lacteal feed followed by honey and sugar water used by 28.63% of mothers.<sup>8</sup> The study carried out by Bagul in the urban slums of Nagpur city, pre-lacteal feeding was given by 78.61% of mothers. 46.72% of mothers were aware of the knowledge that breast milk is nutritious for babies and 25% knows that breast milk prevent babies from infection. In the study carried out by Nigam in the tertiary care hospital of Indore city, 59% of participants believes that breast milk is nutritious to babies while 34% knew that breast milk prevents babies from infection. 10 25% of mothers got the information regarding breast feeding from the elderly female in the family while 22.36% got it from doctor. Similar results were obtained from the study carried out by Yadavannavar among the rural women of Bijapur, Karnataka, where the prevalent source of information was elderly female in the family which was 62.91% followed by doctor which was 11.66%.8 In the study carried out by Bagul A. in the urban slums of Nagpur city, 65.78% of mothers received knowledge of breast feeding from the elderly female in the family while 34.22% from health personnel.<sup>9</sup>

#### **CONCLUSION**

Mothers did not follow WHO recommendation to timely initiate breastfeeding. As it was found that exclusive breast feeding was practiced well by mothers who were housewives which shows that employment was the major obstacles for breast feeding.

#### Recommendations

Health education concerning advantage of timely initiation of breast-feeding and promotion of exclusive breast feeding should be emphasized. The health education regarding expressed milk should be taught to working mothers.

Funding: No funding sources Conflict of interest: None declared Ethical approval: Not required

#### **REFERENCES**

- 1. World Health Organization. Global strategy for infant and young child feeding. The optimal duration of exclusive breastfeeding. Fifthy-fourth world Heal Assem. 2001;(1):1–5.
- Horta BL, Victora CG. Long-term health effects of breastfeeding. World Heal Organ. 2013;129(8– 9):57–64.
- 3. National Family Health Survey-4 or NFHS-4.
- 4. Radhakrishnan S, Balamuruga SS. Prevalence of exclusive breastfeeding practices among rural women in Tamil Nadu. International J Health Allied Sci. 2012;1:2:64-7.
- Dorgham LS, Hafez SK, Kamhawy HE, Hassan WB. Assessment of Initiation of Breastfeeding, prevalence of Exclusive Breastfeeding and their Practices in Taif KSA. Life Science J. 2014;11(1):1-
- Wagh SV, Wagh SS, Raut MM, Dambhare DG, Sharma DA. A Study of Breastfeeding Practices in Vidarbha Region of Maharashtra India. Innovative J Med Health Sci. 2013;238-41.
- 7. Yadavannavar MC, Patil SS. Socio cultural factors affecting breast feeding practices and decisions in rural women. Int J Plant Med Environ Sci. 2011;1(2):46-50.
- 8. Bagul AS, Supare MS. The Infant Feeding Practices in Urabn Slum of Nagpur, India. J Clin Diagnos Res. 2012;6:9:1525-7.
- 9. Nigam R, Nigam M, Wavre RR, Deshpande A, Chandorkar RK. Breastfeeding Practices in Baby Friendly Hospitals of Indore. Indian J Paediatr. 2010;77(6):689-90.

Cite this article as: Srivastava AS, Gawande KB. Factors influencing perception and knowledge of exclusive breast feeding practices among nursing mothers in rural area of Thane district of Mumbai. Int J Community Med Public Health 2018;5:2486-90.