## **Original Research Article**

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20202010

# Knowledge, attitude and practices of lactating mothers towards breastfeeding in a tertiary care hospital Nagpur: a cross sectional study

Sushama S. Thakre<sup>1</sup>, Subhash B. Thakre<sup>2</sup>, Priti N. Tiwari<sup>1\*</sup>, Hitesh C. Tayade<sup>1</sup>

Received: 05 March 2020 Revised: 06 April 2020 Accepted: 08 April 2020

### \*Correspondence:

Dr. Priti N. Tiwari,

E-mail: prititiwari2017@gmail.com

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### **ABSTRACT**

**Background:** Breastfeeding is the most important intervention for reducing infant mortality and ensuring normal growth and development of a child. Objective of this study was to assess the knowledge, attitude, and practices toward Breastfeeding among lactating mothers visiting immune-prophylaxis clinic of tertiary health care centre, Nagpur Maharashtra.

**Methods:** A hospital-based cross-sectional study was conducted among 400 mothers at tertiary health care centre, Nagpur in the state of Maharashtra, India. The lactating mothers whose children under the age of 3 years were interviewed.

**Results:** Maximum number of women were in the age group of 26-30 years (46%). Mothers with parity >1 had satisfactory knowledge regarding breastfeeding (p=0.0001). Prevalence of exclusive breastfeeding rate was found to be 86%.

**Conclusions:** Efforts should be strengthened to make mothers aware of health benefits of breastfeeding for themselves and their offspring to improve the overall maternal and child health.

Keywords: Attachment, Exclusive breastfeeding, Lactating mothers, Knowledge, Positioning

### INTRODUCTION

Breast milk is the best gift that mother can give to her baby. Breastfeeding have a significant effect on both maternal and child health. The poor feeding practices significantly increases the risk of infectious diseases such as diarrhea and acute respiratory infection. It also makes the children vulnerable to irreversible changes like stunting, poor cognitive development. Infant and young child feeding (IYCF) is a set of guidelines for feeding of newborn and children under 2 years of age. IYCF guidelines recommended by the Ministry of Health and Family Welfare, Government of India in 2013 are Initiation of breastfeeding immediately after birth,

preferably within one hour, exclusive breastfeeding for the first six months of life i.e., 180 days, continued breastfeeding for 2 years or afterwards and active feeding for children during and after illness.

These guidelines were incorporated in the Integrated Management of Neonatal and Childhood Illness (IMNCI) Programme.<sup>5</sup> Hoefer and Hardy (1929) had stated that there was a positive association between breastfeeding and the intelligence among children aged between 7 to 13 years. Douglas (1950), reported that the duration of breastfeeding had an inverse relationship with the age at which the child started walking.<sup>6</sup> Benefits of breastfeeding to the baby includes nutritional benefits, immunological benefits and mental growth.

<sup>&</sup>lt;sup>1</sup>Department of Community Medicine, IGGMC, Nagpur, Maharashtra, India

<sup>&</sup>lt;sup>2</sup>Department of Community medicine, GMC, Gondia, Maharashtra, India

While for mother it reduces the chances of postpartum haemorrhage, provides protection against pregnancy, reduces the risk of ovary and breast cancer and helps to reduce weight. According to NFHS 4, children under age 6 months exclusively breastfed are 54.9% and children under age 3 years breastfed within one hour of birth are 41.6%. Proper positioning and attachment of baby to the breast stimulates the release of breast-milk during breastfeeding and increases production of milk. Considering the importance of breastfeeding, current study was conducted to assess the knowledge, attitude, and practices of lactating mothers toward breastfeeding and to observe their positioning and attachment.

#### **METHODS**

This cross-sectional study was carried out at Indira Gandhi Government Medical College, Nagpur which is a tertiary health care centre, from June to September 2019 for period of 4 months. Lactating mothers with their children up to three years were included in the study.

Sample size was calculated using formulae 4pq/l<sup>2</sup>. Where Prevalence of exclusive breastfeeding rate was taken as 54.9% as per NFHS 4 data with allowable error of 5%.

Institutional Ethics committee approval was obtained.

Consent was obtained from all the study participants. Data was collected from immunoprophylaxiis clinic. First four lactating mothers with their children up to three years were interviewed every day. Data was obtained regarding sociodemographic factors; knowledge attitudes and practices of breastfeeding and positioning and attachment was observed. There were total 12 questions regarding knowledge, 7 for attitudes and 8 regarding practices. Of these correct answer to 60% and above was considered to have satisfactory knowledge. On fulfilling all the parameters of positioning and attachment, the participant was considered to have good positioning and attachment.

### Statistical analysis

Data was entered in excel and was analyzed by using the Epi\_Info (version 7). The continuous data were presented as mean values along with their standard deviations (SD). Chi-square test was applied to test the difference between two proportions. P-value of less than 0.05 was considered as statistically significant

### **RESULTS**

The mean age of breastfeeding women was 26.03±3.38; range 19-35 years. Maximum study participants were in the age group of 26-30 years 184 (46%). All the participants were married (100%). 228 (57.00%) study participants were educated above high school and remaining up to high school. 284 (71%) women were Hindu by religion. 228 (56.44%) study participants were

from upper socioeconomic class (class I, II and III) and remaining from lower class.

Table 1: Sociodemographic profile of study population.

Demographic variables	Group	Frequency (%)
A == (======)	≤20	12 (3)
	21-25	168 (42)
Age (years)	26-30	184 (46)
	>30	36 (9)
Marital status	Married	400 (100)
Ed 4	Up to high school	172 (43.00)
Education	Above high school	228 (57.00)
	Hindu	284 (71)
Religion	Muslim	72 (18)
	Buddhist	32 (8)
	Christian	12 (3)
Socioeconomic	Upper (I, II and III)	228 (56.44)
class	Lower (IV and V)	176 (43.56)
Type of family	Joint	208 (52)
	Nuclear	140 (35)
	Three generation	52 (13)
Occupation	Homemaker	356 (89)
	Working women	44 (11)

Table 2: Distribution of study subjects according to parity and type of delivery.

Variable	Group	Frequency (%)
Parity	Primipara	212 (53)
	Multipara	188 (47)
Type of delivery	Normal vaginal delivery	180 (45)
	Caesarean section	220 (55)

A total 356 (89%) participants were homemaker and remaining 44 (11%) were working women. 208 (52%) participants were from joint family and other from nuclear 140 (35%) and three generation family 52 (13%). Maximum number of women were primiparous 212 (53%). Majority of women delivered by caesarean section 220 (55%). Multiparous women were having satisfactory knowledge about breastfeeding as compared to primiparous women and it was statistically significant (p=0.0001). Those women living in nuclear family were having satisfactory knowledge as compared to joint and three generation and this was statistically significant (p=0.00001). Multiparous women were having satisfactory attitudes towards breastfeeding as compared to primiparous women and it was statistically significant (p=0.03). Those women living in nuclear family were having satisfactory attitudes as compared to joint and three generation and this was statistically significant (p=0.00001). Maximum number of women 272 (68%) preferred sitting position for breastfeeding. 220 (55%) of women given feeding on demand. 200 (50%) of womeninitiated breastfeeding within an hour while 92 (23%) initiated after six hours. 344 (86%) women exclusively breastfeed their child. 67.05% women were having good

positioning and attachment of baby was good in all that is 100%.

Table 3: Distribution of study subjects according to knowledge of breastfeeding.

Variable	Group	Knowledge		_ Total	Chi square p value
		Satisfactory	Un-satisfactory		
Dowitz	1	84 (39.62%)	128 (60.38%)	212 (53%)	15.08 (0.0001)* Df=1
Parity	>1	112 (59.57%)	76 (40.43%)	188 (47%)	
Education	Up to high school	96 (55.81)	76 (44.19)	172 (43)	0.77 (0.379) Df=1
	Above high school	116 (50.88)	112 (49.12)	228 (57)	
Socioeconomic	Upper	128 (56.14)	100 (43.86)	228 (56.44)	1 26 (0 260)
class	Lower	88 (50.00)	88 (50.00)	176 (43.56)	1.26 (0.260)
Type of family	Joint	116 (55.76)	92 (44.24)	208	35.63 Df=2 (0.00001)*
	Nuclear	88 (62.85)	52 (37.15)	140	
	Three generation	8 (15.38)	44 (84.62)	52	

Table 4: Distribution of study subjects according to attitudes of breastfeeding.

Variable	Group	Attitudes		_ Total	Chi square p value
		Satisfactory	Un-satisfactory		
Dowitz	1	148 (69.81)	64 (30.19)	212 (53.00)	4.70 (0.03)*
Parity	>1	150 (79.79)	38 (20.21)	188 (47.00)	
Education	Up to high school	136 (79.07)	36 (20.93)	172 (43.00)	1.27 (0.258)
	Above high school	168 (73.68)	60 (26.32)	228 (57.00)	
Socioeconomic	Upper	180 (78.95)	48 (21.05)	228 (56.44)	1.70 (0.18)
class	Lower	128 (72.73)	48 (27.27)	176 (43.56)	1.79 (0.18)
Type of family	Joint	136 (65.38)	72 (34.62)	208	31.14 (0.00001)* Df=2
	Nuclear	128 (91.43)	12 (8.53)	140	
	Three generation	40 (76.92)	12 (23.08)	52	

<sup>\*</sup>P-value significant.

### **DISCUSSION**

In this study 200 (50%) of mothers initiated breastfeeding within 1 hour, however in study conducted by Vinay et al 41.07% participants among vaginal delivery and 57.31% among caesarean delivery mothers initiated breast feeding within half an hour. 100 (21%) babies born were put on breast within first hour of life was reported by Vyas et al. 10 In study conducted by Junaid et al, 78.28% mothers initiated breastfeeding within 6 hours of delivery whereas only 36.9% mothers initiated breast feeding within an hour was reported by Vijayalakshmi et al. 11,12

The mean age of mothers in our study was  $26.03\pm3.38$  years, however in study conducted by Nishimura et al, mean age was  $20.8\pm2.75$  years. <sup>13</sup>

Exclusive breastfeeding rate in this study was found to be 86%. However, the EBF rate as reported by Holly Nishimura et al was 48.5%. Chinnasami et al reported that exclusive breastfeeding rate for six months was 72%. Only 5.13% babies were exclusively breastfed till six months in study conducted by Vyas et al, Junaid et al

found exclusive breastfeeding rate as 58.58% mothers. 10,11

In this study 100% respondents, reported that they would recommend breastfeeding to relatives and friends. Similar finding was observed by Patel et al.<sup>15</sup>

A total 64.25% mothers were having knowledge regarding duration of exclusive breastfeeding in our study, whereas, in study conducted by Rajput et al it was 57.25%. 16

Maximum numbers of mothers i.e. 89% were nonworking and 11% were working in our study. However, in study conducted by Rajput RR it was 92.75% and 7.25% of participants were nonworking and working respectively.<sup>16</sup>

Authors found on demand breastfeeding in 55% of participants. However, in study conducted by Mise et al it was 60.7%. <sup>17</sup>

In this study, 70% women was having knowledge that breast feeding helps in mother and child bonding,

however, in study conducted by Vijayalakshmi et al it was 97.5%. 12

Table 5: Distribution of study subjects according to practices of breastfeeding.

Variable	Group	Frequency (%)
Adoption of	Sitting	272 (68)
breastfeeding	Lying	20 (5)
posture	Both	108 (27)
Reason for	Comfort of baby	264 (66)
adoption of	Convenience	120 (30)
position	Religion	16 (4)
Frequency of feeding	8 times	92 (23)
	>8 times	88 (22)
	On demand	220 (55)
Initiation of	<1 hour	200 (50)
breastfeeding after birth	<6 hours	108 (27)
	>6 hours	92 (23)
Reason for	Child health	312 (78)
adoption of	Advised by doctor	56 (14)
breastfeeding	Religion	28 (7)
For how long exclusively	<6 months	32 (8)
	6 months	344 (86)
breastfeed	1 year	24 (6)

Nearly 66% mothers in our study felt shy to feed in public places, whereas Mumtaz S et al, noticed it to be 78%. <sup>18</sup>

#### **CONCLUSION**

The study concluded that undesirable practices related to infant feeding such as delay in initiation of breastfeeding; low rates of exclusive breastfeeding and lower frequency of breastfeeding practices are still prevalent. The results of this study may be helpful to policy makers when planning educational interventions on breastfeeding both during ante-natal period and during hospital admissions for delivery. Efforts should be strengthened to make mothers aware of health benefits of breastfeeding for themselves and their offspring to improve the overall maternal and child health.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

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Cite this article as: Thakre SS, Thakre SB, Tiwari PN, Tayade HC. Knowledge, attitude and practices of lactating mothers towards breastfeeding in a tertiary care hospital Nagpur: a cross sectional study. Int J Community Med Public Health 2020;7:1941-5.