

# TO STUDY KNOWLEDGE AND PRACTICES REGARDING BREASTFEEDING AMONG RECENTLY DELIVERED WOMEN.

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## ABSTRACT

**Background:** Breastfeeding is an ancient social custom, an unparalleled and most determinant way of giving ideal and safest food for the optimum development of vulnerable infants which fulfills all nutritional needs. WHO proposes exclusive breastfeeding during the 1<sup>st</sup> six months and introduction of safe complimentary feeds from 6 months onwards with continuation of breastfeeding till 2 years of life. This study intends to give a better understanding of not only breastfeeding behaviors, but also of practices regarding formula feeding in 'upper middle class' population.

**Aims and Objective:** To assess the knowledge, and practices of breastfeeding mothers with Children less than 2 years.

**Materials and methods:** The hospital based prospective study was conducted from between 15 January 2021 to 14 January 2022. The participants were selected through convenient non-random sampling. A semi-structured questionnaire including the participants' data, knowledge, and practices was used.

**Results:** 130 postnatal mothers were included to assess their knowledge regarding breastfeeding.

The study revealed that 73.8 % of the lactating mothers have moderate level of knowledge, 14.6% have high level of knowledge and 11.5% % of them low level of knowledge regarding breastfeeding.

**Conclusion:** From this study, we came to the conclusion, that antenatal check-ups and antenatal breastfeeding counseling are the most important determinants for initiation, establishment and maintenance of successful breastfeeding knowledge and practice.

**Key words:** Exclusive breastfeeding, burping, colostrum.

## Introduction

Breastfeeding is an ancient social custom, an unparalleled and most determinant way of giving ideal and safest food for the optimum development of vulnerable infants which fulfills all nutritional needs and is practically a widespread practice and an integral part of mothers in India but is related with superstitions and myths.<sup>[1]</sup>

Evidence based research has emphasized on the magnitude of advantages of breastmilk and

breastfeeding in child survival, spacing between siblings and prevention from childhood diseases and recommended feeding of infants as it is a fundamental health issue, not a lifestyle choice.<sup>[2,3]</sup>

WHO proposes exclusive breastfeeding during the 1<sup>st</sup> six months and introduction of safe complimentary feeds from 6 months onwards with continuation of breastfeeding till 2 years of life or beyond is crucial with important implications on growth in later periods of childhood.<sup>[4]</sup>

Breastmilk is easily digestible which should be started within one hour of birth and carried on till the time baby requires as advised by the health care experts because of its innumerable benefits to mother-baby dyad and it makes the emotional bond stronger between them by facilitating skin-to-skin contact (reducing chances of hypothermia), mental happiness and sensation of safety.<sup>[5]</sup>

Breastmilk has anti-infective properties, provides short-term and long-term benefits, protects children from acute and chronic diseases, hence it is more superior immunologically as well as is more in nutritive value as compared to formula-milk.<sup>[6,7]</sup> There is a significant increase in morbidity due to infections with addition of prominent risks for type 1/2 diabetes, SIDS (sudden infant death syndrome), childhood obesity and leukemia in infants who are not breastfed. Increased risk of ovarian cancer, type 2 diabetes, metabolic syndrome, premenopausal breast cancer and myocardial infarction is associated with mothers who fail to establish successful breastfeeding.<sup>[8]</sup>

According to the NFHS-4, just 41.6% of children aged 0-6 months are exclusively breastfed and only 5.3% of breastfeeding children age 6-23 months receiving a sufficient diet in UP state. This reveals huge reduction in adequacy of food among children aged 6-23 months. Hence, it is necessary to offer knowledge regarding Breast feeding to mothers for guaranteeing right attitude and practices. Because mother is intimately associated for rearing and growth. This suggests an urgent necessity of a research to analyze knowledge, attitude and practices of mother with children less than 2 years related Breastfeeding and nutrition to enhance statistics of UP state, particularly in my area.

This study intends to give a better understanding of not only breastfeeding behaviors but also of practices regarding formula feeding in upper middle-class population. It tries to study the impact of education and occupation of mothers on feeding behaviors knowledge in a better way. It also intends to analyze 'BFHI practices' and its effect on breastfeeding after discharge from hospital.

### **Aim and Objectives of the study**

To assess the knowledge, and practices of breastfeeding mothers with Children less than 2 years, with respect to various association of socio-demographic.

## METHODS

### Study design

The cross-sectional observational study took place at Rajshree Medical & Research Institute. The study would take place in the time interval between 15 January 2021 to 14 January 2022.

### INCLUSION CRITERIA:

All the primipara and multipara mothers who delivered within last 3 months coming to OPD or IPD in RMRI, Bareilly

### EXCLUSION CRITERIA:

Mothers of babies with congenital malformations which hamper reestablishment of normal breastfeeding.

Mothers not ready to participate in the study.

Mothers with stillborn babies.

### DATA COLLECTION METHODS:

Subjects were included in the study only after obtaining the written informed consent. Data collection was done over a period of one year. For the purpose of collection of data, a semi-structured interview proforma was made in English which was converted into Hindi. This questionnaire (which was validated on the sample population) was used to collect data from the respondents. The questionnaire included socio-economic and demographic data, details on knowledge and practice of the initiation and duration of breastfeeding.

Grading of level of knowledge was done accordingly.

1-8 – low level of knowledge

9-16 – moderate level of knowledge

17-23 – high level of knowledge

### STATISTICAL ANALYSIS:

Data analysis for the study was based on the answers given by the postnatal mothers using a pre-tested preformed questionnaire. Chi-square test was used to analyze the categorical variables included in the study. “p-value of <0.05 was considered as statistically significant.”

## RESULTS

The following table depicts the demographic as well as socio-economic characteristics of the postnatal mothers which were included in the study.

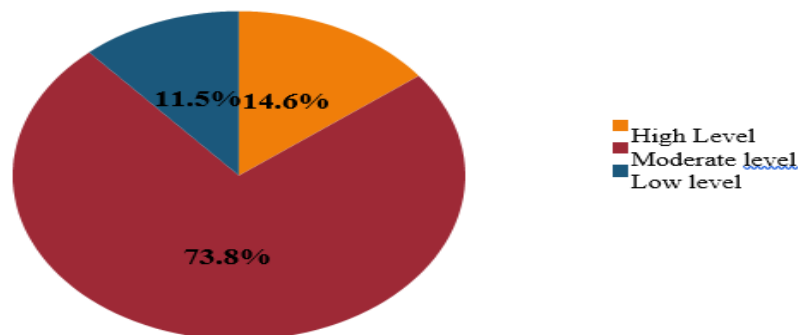
Baseline characteristics	F	%
Age in years		
< 21 Years	7	5.4
21-25 Years	67	51.5
26-30 Years	46	35.4
> 30 Years	10	7.7
Religion		

Hindu	56	43.1
Muslim	74	56.9
<b>Parity</b>		
Primi	55	42.3
Multi	75	57.7
<b>Mode of Delivery</b>		
NVD	57	43.8
LSCS	73	56.2
<b>Education (Literacy)</b>		
Illiterate	30	23.1
Primary school	26	20.0
Middle school	20	15.4
High school	26	20.0
Intermediate	13	10.0
Graduate and above	15	11.5
<b>Occupation</b>		
Working	22	16.9
Not Working	108	83.1
<b>No. of Antenatal Checkups</b>		
Nil	6	4.6
1-3	49	37.7
> 3	75	57.7

**Table 1:- Frequency and Percentage Distribution of Mothers baseline characteristics**

The data presented in Table 1 reveal that, 51.5% of the mothers were belonging in the age group of 21 to 25 years, 56.9% of them belongsto Muslim religion, majority (57.7%) of them were multiparas, around 56.2% underwent LSCS as a mode of delivery, 23.1% of them were illiterates. 83.1% were non-working mothers, around 69.2% were living in joint families, about 57.7% of the mothers had more than 3 antenatal check-ups and most (56.9%) of them went to government hospital for the antenatal check-ups.

### **Distribution of mothers based on level of knowledge on breast feeding**



**Figure 1. Pie chart showing frequency and percentage distribution of the mothers based on level of knowledge on breast feeding.**

The data presented in figure 1 revealed that 73.8 % of the lactating mothers have moderate level of knowledge, 14.6% have high level of knowledge and 11.5% % of them low level of knowledge regarding breastfeeding.

**Table 2: Frequency and Percentage Distribution of participants based on practices regarding breastfeeding**

Practices	F	%
Breast feeding Initiated in the family		
Within 1 Hour	2	1.6
1-4 hours	61	46.9
>4 Hours	67	51.5
Pre-lacteal feeds are given at your home		
Ghutti	51	39.2
Honey	33	25.4
Sugar water	2	1.5
Nothing	44	33.8
Hold of Baby while Breast Feeding		
Sitting	75	57.7
Lying Down	4	3.1
Both	51	39.2
Do your family members stop you from Breastfeeding		
Yes	5	3.8
No	125	96.2
Do you feel shy in nursing in public		
Yes	46	35.4
No	84	64.6
Do you think your milk is sufficient for your Baby		
Yes	56	43.1
No	74	56.9

The data presented in table 2 revealed that, in majority (51.5) of the participants breastfeeding was Initiated in the family >4 Hours, around 39.2% of the participants gave ghutti as a pre-lacteal feed to the newborn, most (57.7%) of the participants breastfeed the baby in the sitting position, majority (96.2%) of the mothers are supported by their families for breast feeding, around 64.6% of participants don't feel shy to feed their babies in public and about 56.9 % of the mothers felt that their milk is not sufficient for the baby.

**Table 3: Association between level of knowledge with selected mothers baseline characteristics.**

Baseline characteristics	Level of knowledge			<sup>2</sup>	Df	p value
	High	Moderate	Low			
<b>Age in years</b>						
< 21 Years	1	5	1	4.586	6	.598
21-25 Years	8	52	7			
26-30 Years	10	31	5			
> 30 Years	0	8	2			
<b>Religion</b>						
Hindu	4	46	6	4.734	2	.094
Muslim	15	50	9			
<b>Parity</b>						
Primi	9	40	6	0.248	2	.884
Multi	10	56	9			
<b>Education (Literacy)</b>						
Illiterate (No formal education)	2	17	11	33.48	10	.001*
Primary school	2	22	2			
Middle school	2	17	1			
High school	4	22	0			
Intermediate	4	8	1			
Graduate and above	5	10	0			
<b>Occupation</b>						
Working	5	16	1	2.319	2	.314
Not Working	14	80	14			
<b>No. of Antenatal Check-ups</b>						
Nil	1	2	3	16.04	4	.003*
1-3	2	37	10			
> 3	16	53	3			
<b>Place of antenatal Check-ups</b>						
Government Hospital	9	52	13	20.35	6	.002*
Private Hospital	8	17	0			

Nursing Home	1	24	0			
None	1	3	2			
<b>Antenatal counseling Attended</b>						
Yes	5	13	0	4.895	2	.087
No	14	83	15			

The data presented in the Table 3 depicts that there is a statistically significant association between the level of knowledge in mothers with education ( $p=0.001$ ), number of antenatal check-ups ( $p=0.003$ ) and place of antenatal check-ups ( $p=0.002$ ).

## DISCUSSION

This study discusses different variables regarding knowledge and practices of postnatal mothers pertaining to breastfeeding in Uttar Pradesh, therefore results of this study might be helpful in planning interventions and outlining policies for neonatal health.

In this study, out of a total of 130 mothers, only 7(5.4%) mothers belonged to age group <21yrs, 67(51.5%) mothers belonged to age group of 21-25yrs, 46(35.4%) mothers belonged to age group of 26-30yrs and 10(7.7%) mothers belonged to age group of >30yrs. Our study showed that 74(56.9%) females were Muslim whereas 56(43.1%) females were Hindu by religion. Out of 130 mothers interviewed about knowledge and practice, majority 75(57.7%) were multiparas while 55(42.3%) were primiparas.

Majority females 73(56.2%) underwent caesarean section as a mode of delivery and 57(43.8%) had delivered their baby by normal vaginal delivery. Opposite results were seen in a study by, Vijayalakshmi et al<sup>[9]</sup> where majority (78.7%) mothers delivered via normal vaginal delivery.

Greater part of mothers included in our study were literate but with variable levels of education. 26(20.0%) received primary school education, 20(15.4%) received middle school education, 26(20.0%) received high school education, 13(10.0%) had intermediate level while 15(11.5%) mothers were graduates. 30(23.1%) mothers were illiterate. Illiteracy in mother is related with less than optimal feeding practices.<sup>[10]</sup>

Our study included both non-working mothers 108(83.1%) and working mothers 22(16.9%). Non-working mothers apparently have more time accessible for feeding their infants. Majority of females 90(69.2%) were living in a joint family and 40(30.8%) mothers had a nuclear family. Out of 130 deliveries, 79(60.8%) males were born and 51(39.2%) females were born. Antenatal check-ups are a major factor influencing breastfeeding practices and knowledge. 75(57.7%) females had >3 antenatal checkups, 49(37.7%) females only had 1-3 checkups during entire pregnancy while only 6(4.6%) females did not visit any healthcare facility in the antenatal period.

Out of them, 74(56.9%) attended a government hospital, 25(19.2%) mothers had their

check-up in private hospital and 25(19.2%) mothers in nursing homes.

Saaka et al<sup>[11]</sup> showed that majority of the women interviewed registered for antenatal care. Effective breastfeeding of newborn is practiced by less than half of the respondents. Among the 130 mothers, only 12(9.2%) mothers had knowledge to initiate breastfeeding within one hour of birth, 58(44.6%) mothers knew to initiate breastfeed within 1-4 hours of birth and 60(46.2%) mothers knew the timing of initiation to be >4hrs, but only a few mothers brought this knowledge into practice. Only in 2(1.5%) females, breastfeeding was started within one hour of birth, 61(46.9%) mothers breastfed within 1-4hrs of delivery and 67(51.5%) mothers fed their newborns after 4hrs of delivery.

Ausvi et al<sup>[12]</sup> showed that 37.29% mothers started breastfeeding within half hour of delivery where rate was high as compared to our study. Our results are similar to the studies by Vyas et al<sup>[13]</sup>, Takalkar et al<sup>[14]</sup> and Kar et al<sup>[15]</sup> in which majority mothers-initiated breastfeeding within first 24hrs of delivery but in Kumar et al<sup>[16]</sup> less than half of the mothers could only initiate within 24hrs.

Among all mothers, 41(31.5%) mothers had idea that newborns should be fed <8times in 24hrs, 24(18.5%) mothers knew the frequency to be >8times, 26(20.0%) mothers breastfed their babies every two hourly whereas 39(30.0%) mothers followed demand feeding that means feeding when child cries. Demand feeding, reportedly an extremely widespread practice in India, was seen in majority (89%) mothers according to Vyas et al<sup>[17]</sup>, 84.1% in a study by Bandyopadhyay et al<sup>[18]</sup> in Bengal and 38% in a study by Srivastava et al<sup>[19]</sup> in Kanpur. Junaid et al<sup>[20]</sup> found that 35.3% women feed their babies on a 2 hourly basis while 51.5% breastfeed only when the child cries.

In our study, 44(33.8%) mothers knew the advantages of colostrum and felt that it should be given to the baby. These results are comparable to study by Taja et al<sup>[21]</sup> conducted in a rural district of MP which showed that 22.7% fed colostrum to their babies and 77.3% discarded colostrum. In contrast, majority of newborns were given colostrum in the study by Ausvi et al<sup>[22]</sup> which were 72.44%. Similar information was obtained in studies by Thakur et al<sup>[23]</sup> and Parmar et al<sup>[24]</sup>. In study by Mise et al<sup>[25]</sup> an overwhelming majority of mothers (88.4%) fed their newborns with colostrum.

In our study, 55(42.3%) mothers had knowledge that the child should be breastfed exclusively till 6 months of age, 38(29.2%) mothers thought that age of exclusive breastfeeding is 12 months whereas 37(28.5%) mothers had knowledge that child should be exclusively breastfed for 2years. These results are at variance with Benjamin et al<sup>[26]</sup> in Punjab and Aggarwal et al<sup>[27]</sup> in Delhi where rates of exclusive breastfeeding were 57.7% and 63.5% respectively.



Majority 114(87.7%) women had knowledge that burping is necessary after feeding and 16(12.3%) mothers had no knowledge regarding this. But according to Shrestha et al<sup>[28]</sup> merely 15% mothers practiced burping the newborn child after breastfeeding.

Our study revealed that majority of the mothers (73.8%) have moderate level of knowledge, 14.6% mothers have high level of knowledge and 11.5% mothers have low level of knowledge. Statistically significant association is seen between level of knowledge with education ( $p=0.001$ ), number of antenatal checkups ( $p=0.003$ ) and place of antenatal checkups ( $p=0.002$ ).

## CONCLUSION

Thus, we came to the conclusion from the results of our study that antenatal check-ups and antenatal breast-feeding counseling are the most important determinants for initiation, establishment and maintenance of successful breastfeeding practices and optimal care of newborn after delivery. Effect of literacy of the mothers is seen to be of utmost importance in accepting healthy practices and avoiding harmful practices. Health education among mothers should be promoted improving the coverage of accessible health services and adoption of beneficial practices. Essential steps are needed to be taken by the Government in order to increase the awareness in the mothers about safety actions to handle newborns by using Information, Education and Communication (IEC) activities. ASHA and Anganwadi workers play an important role in helping the implementation of safe practices. Kangaroo mother care and hygienic practices needs extra emphasis. Most of the neonatal intervention programs are not successfully reaching newborns.

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