



**ORIGINAL RESEARCH PAPER**

**Community Medicine**

**A CROSS-SECTIONAL COMPARATIVE STUDY ON KNOWLEDGE, ATTITUDES AND PRACTICES AMONGST MULTIPARA AND PRIMIPARA MOTHERS ON EXCLUSIVE BREASTFEEDING**

**KEY WORDS:** KAP, Primipara, Multipara, Mothers, EBF, UHTC

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**ABSTRACT**

Breastfeeding has many benefits for mother and infant. Breast milk contains all the nutrients an infant needs in the first six months of life. Small number of information on the disparity in KAP on EBF between primi and multipara mothers is available. This study compares the KAP on EBF between primi and multipara mothers attending UHTC, Rewa and assessed the KAP on EBF. Information on EBF was collected through a questionnaire for a total of 380 mothers, primipara (n=167) and multipara (n=213) with infants 0–6 months of age. Maternal knowledge and attitudes on various aspects of breastfeeding were determined. The practice of EBF was determined based on a 24-h recall. The prevalence of EBF among primipara mothers was 58.4% and multipara mothers 66.3%. The study shows that mothers have good knowledge towards EBF but there is a lacuna in practicing the EBF. Promotion of EBF should be done.

**INTRODUCTION :**

Breastfeeding has been conclusively demonstrated as one of the important determinants for comprehensive growth and development of infants. The WHO and UNICEF recommends that newborns and infants should be fed only with breast milk within the first hour after birth until 6 months of life. Early initiation of breastfeeding and exclusive breastfeeding can prevent deaths of children due to diarrhea and pneumonia. Exclusive breastfeeding for first six months is necessary. This not only protects the children by providing them immunity against a lot of diseases, but also helps mothers to reduce weight and chances of breast cancer [1]. Exclusive breastfeeding is defined as giving no other food or drink to the infant, not even water, except breast milk (including milk expressed or from a wet nurse) for the first 6 months of life, but allows the infant to receive ORS (oral replacement solution), drops and syrups (vitamins, minerals and medicines) [2]. Various studies have shown that infant feeding could be influenced by socioeconomic status, maternal education, place of living and many other factors.[3,4,5]. Poor infant feeding practices and their consequences are one of the world’s major problems and a serious obstacle to social and economic development. It is not only a problem of the developing world, it occurs in many parts of the developed world as well [6].

**MATERIALS & METHODS:**

**Study design**

A cross-sectional study carried out at the Urban Health Training Center (UHTC) associated with S.S. Medical College, Rewa. The study participants were mothers of infants 0–6 months old attending the UHTC associated with S.S. Medical College, Rewa.

**Sample size**

The proportion of the target population estimated to be exclusively breastfeeding was 55% based on the NFHS-4 (national prevalence of EBF is 54.9%) most recent national rate at the time of the study [7].

The sample size was calculated as follows:

$$n = Z^2pq/d^2$$

Where n = the required sample size, Z = the standard normal deviate at 95% confidence level (1.96), p = the proportion of the target population practices EBF (55%), q = 1-p; and d = desired level of precision (0.05). This yielded a sample size of 380.

**Inclusion Criteria:**

- Mothers of infants 0–6 months old, attending the UHTC.
- Mothers who have given consent to participate.
- Mothers and infants without any major disease.

**Exclusion Criteria:**

- Mothers on medications in which breastfeeding is

contraindicated

- Mothers diagnosed with serious congenital malformations in which breastfeeding was not feasible.
- Those who were not interested to participate.

**Data collection tools**

A structured questionnaire in Hindi language was used to collect the data (8). The questionnaire asks for information on: maternal demographic and socioeconomic characteristics; maternal knowledge, attitudes and practices on breastfeeding; sources of breastfeeding information; and infant feeding practices. Information on breastfeeding practices included; timing of initiation of breastfeeding, feeding on colostrums, giving of pre-lacteal and post lacteal feeds and exclusive breastfeeding. The duration of data collection was six months. Informed verbal consent was obtained from the respondents who have participated in the study. Participants were assured of confidentiality.

**Data analysis and presentation**

The data were checked, cleaned and analyzed by using Statistical Package for Social Sciences (SPSS) version 16.0. Descriptive statistics (frequencies, percentages, means and standard deviation) were used to describe maternal demographic and socioeconomic characteristics, prevalence of EBF, knowledge, attitudes and practice of EBF. A t-test was used to establish significant differences if any, for continuous data whereas Chi-square test was applied to test the association between the categorical variables. A p - value of < 0.05 was used as the criterion for statistical significance.

**Study variables**

The prevalence of exclusive breastfeeding practice among primipara and multipara mothers of infants 0–6 months of age was determined by 24-h maternal recall. The variables for the study were maternal knowledge and attitudes towards EBF. Maternal knowledge was tested by 10 questions covering various aspects of breastfeeding. A correct response was scored one (1) and incorrect response zero (0). The total possible score was 10. Those mothers who scored less than 3 out of 10 were categorized as having poor knowledge, those who scored 3–6 were considered as having reasonable knowledge and those who scored 7 and above were categorized as adequate knowledge [9]. Maternal attitude towards EBF was determined by responses to 10 questions. The Likert Scale was used to rate the attitudes and an attitude score calculated. Each correct (positive attitude) response was awarded a score of 2 whereas an incorrect (negative attitude) response got a score of zero (0). To determine the maternal attitudes towards breastfeeding issues, there were three categories- agree, disagree and don't know. The total possible score for correct responses for all aspects of attitude test was 20.

Those mothers who scored less than 10 were categorized as having poor attitudes, those who scored 11–16 had moderate attitudes and those scoring 17–20 had positive attitudes [9].

**RESULTS AND DISCUSSION:**

There was a significant difference between the age of primipara and multipara mothers (p=0.00) while no significant difference has been observed between the age of infants (p=0.19). The majority of the mothers in the groups were literate (Table-1). Almost similar finding was reported by Mohamed et al. [8] in there analytical study at Kenya.

In our study, the prevalence of EBF among primipara mothers was 58.4% and multipara mothers 66.3%. The findings on the EBF rate in our study are similar to Medhi et al. in an article on Assam tea garden workers showed the prevalence of exclusive breastfeeding to be 69.35% up to six months of age [10] irrespective of the parity. In similar study done by Banapurmath et al. in Davanagere district showed that 73% of infants in the age group of 0-3 months were exclusively breastfed and 60% in the 4–6 months' age group [11].

It was observed that maternal knowledge on exclusive breastfeeding amongst mothers was excellent, they were aware that breast milk should be baby's first feed. Most of the mothers also knew that the baby should be put to the breast within the first hour of birth. The knowledge on breastfeeding among the primi and multipara mothers was similar. The mean knowledge score out of a total of 10 was 8.50±1.60 and 8.2±1.40 for the primipara and multipara mothers respectively. The level of knowledge on various aspects of breastfeeding was high (Table-2). While Mohamed et al. [8] in there analytical study at Kenya reported that the mean knowledge score among primipara and multipara mothers was 7.93±2.10 and 7.49±2.20 respectively.

**Table-1 : Socio demographic profile of mothers and infants**

	Primipara (n=167)		Multipara (n=213)		Total (n=380)		p-value
	n	%	n	%	n	%	
Sex of children:							
Male	107	64	100	47	207	54	0.01
Female	60	36	113	53	173	46	
Age of infant in months (mean ±sd)	3.8 ±1.6		3.6±1.4		3.7 ±1.7		0.19
Maternal age in years (mean ±sd)	21.2 ±2.3		23.6±3.3		22.9 ±3.4		0.00
Education:							
Literate	128	76.6	172	80.7	300	78.9	0.39
Illiterate	39	23.4	41	19.3	80	21.1	

Maximum number of mothers believes that EBF is beneficial to the child. A good proportion of the mothers believe that breastfed babies are healthier than non-breastfed babies. Formula feeding is a better choice for working mothers, reported my maximum respondents and also believes that breast milk is more easily digestible than animal milk. Disparity among the mothers also

observed towards breastfeeding attitude aspects. No significant differences have been observed in maternal attitudes on the various aspects of breastfeeding between the primi and multipara mothers (Table-3). The findings are quite comparable with Mohamed et al. [8] in there analytical study at Kenya.

**Table-2 : Knowledge on breastfeeding**

Aspect of Knowledge	Primipara (n=167)		Multipara (n=213)		Total (n=380)		p-value
	n	%	n	%	n	%	
Breast milk should be baby's first feed	153	91.6	201	94.4	354	93.2	0.39
Baby should be put to breast within 1 h of birth	158	94.6	208	97.7	366	96.3	0.19
Colostrums should be fed to the baby	162	97.0	206	96.7	368	96.8	0.89
Breast milk alone can sustain baby for 6 months	148	88.6	193	90.6	341	89.7	0.64
Breast feeding protects baby from illness	160	95.8	199	93.4	359	94.5	0.43
Breast feeding protects mother from pregnancy	140	83.8	180	84.5	320	84.2	0.97
Expressed breast milk should be fed to the baby	96	57.5	124	58.2	220	57.9	0.96
Semi-solid food to be introduced at 6 months	65	38.9	99	46.5	164	43.2	0.17
A pregnant woman can breastfeed her baby	88	52.7	106	49.8	194	51.1	0.64
A baby should be breast fed on demand	120	71.9	168	78.9	288	75.8	0.14

The majority of the primi and multipara mothers initiated breastfeeding within the first hour after delivery. While Patel and Saxena [14], in their separate study at Rewa (M.P.) reported 72.4% mothers have initiated breastfeeding within the first hour after delivery and Kulkarni et al [13] at Navi Mumbai reported 61.3% mothers have initiated breastfeeding in first 6 hour after delivery. A very less percentage of primi and multipara mothers gave prelacteal feeds to their infants. Krishnendu et al [12] at kerala reported 15.8% prelacteal feeds in their study and Patel and Saxena [14], in their separate study at Rewa (M.P.) reported 33.2% mothers gave prelacteal feeds. There was no significant difference in the early infant feeding practices between primi and multipara mothers. The majority of mothers have told that they have given colostrums in first 3 days (Table-4). Patel and Saxena [14], in their study reported 58.8% mothers gave colostrums. Overall, the EBF rate for infants 0–6 months old was 64.5%. These figures are quite comparable with Krishnendu et al at kerala and Mohamed et al. [8] in their study at Kenya.

**Table-3 : Attitude towards breastfeeding**

Aspects of Attitude	Primipara (n=167)						Multipara (n=213)						p-value
	Agree		Disagree		don't know		Agree		Disagree		don't know		
	n	%	n	%	n	%	n	%	n	%	n	%	
Believe that EBF is beneficial to the child	138	82.6	22	13.2	7	4.2	187	87.8	18	8.5	8	3.8	0.31
The age of the mother influences her ability to EBF	142	85.0	20	12.0	5	3.0	188	88.3	22	10.3	3	1.4	0.48
A baby can survive without water	112	67.1	52	31.1	3	1.8	134	62.9	75	35.2	4	1.9	0.69
Husbands should be involved in decision making on whether to EBF	138	82.6	22	13.2	7	4.2	176	82.6	35	16.4	2	0.9	0.08
Animal milk is suitable for a new born baby	86	51.5	74	44.3	7	4.2	112	52.6	98	46.0	3	1.4	0.24

Breast milk is inadequate for babies 2 months or older	95	56.9	62	37.1	10	6.0	126	59.2	74	34.7	13	6.1	0.89
Formula feeding is better choice for working mothers	122	73.1	40	24.0	5	3.0	161	75.6	40	18.8	12	5.6	0.25
Breastfed babies are healthier than fed babies	144	86.2	20	12.0	3	1.8	192	90.1	19	8.9	2	0.9	0.46
Breast milk is more easily digested than formula	151	90.4	14	8.4	2	1.2	195	91.5	16	7.5	2	0.9	0.92
Breastfeeding Should be stopped when child has diarrhoeal episodes	124	74.3	42	25.1	1	0.6	166	77.9	44	20.7	3	1.4	0.45

**Table-4 : Breastfeeding practices**

Breastfeeding initiation	Primipara (n=167)		Multipara (n=213)		Total (n=380)		p-value
	n	%	n	%	n	%	
Within 1 h	96	57.5	138	64.8	300	78.9	0.21
Between 1 h to 24 h	62	37.1	61	28.6	73	19.2	
24 h and more	9	5.4	14	6.6	7	1.8	
Colostrums given in 1st 3 days:							
Yes	142	85.0	185	86.9	327	86.1	0.72
No	25	15.0	28	13.1	53	13.9	
Prelacteal feeds given :							
Yes	22	13.2	18	8.5	40	10.5	0.15
No	138	82.6	179	84.0	317	83.4	
Don't know	7	4.2	16	7.5	23	6.1	
Types of Prelacteal feeds given:							
Plain boiled water	12	54.5	9	50.0	21	52.5	0.48
Glucose water	4	18.2	6	33.3	10	25.0	
Formula milk	6	27.3	3	16.7	9	22.5	
Post lacteal feeds given:							
Yes	10	6.0	8	3.8	18	4.7	0.43
No	157	94.0	205	96.2	362	95.3	
Types of Post lacteal feeds given:							
Plain boiled water	5	50.0	3	37.5	8	44.4	0.69
Glucose water	2	20.0	4	50.0	6	33.3	
Non-maternal milk	2	20.0	1	12.5	3	16.7	
Tea/Juice	1	10.0	0	0.0	1	5.6	

**CONCLUSION:**

There were no significant differences in the knowledge, attitudes and practice of exclusive breastfeeding among primipara and multipara mothers. The findings of our study have demonstrated that parity did not influence the practice of exclusive breastfeeding. Strengthening of prenatal and postnatal interventions to improve exclusive breastfeeding practices is recommended along with cafeteria approach to family planning. Healthcare professionals should go beyond the mere dissemination of information regarding breast feeding, duration and age of weaning. Interventions to promote exclusive breastfeeding should be tailored to the needs of each population. In addition to improving maternal knowledge and attitudes,

focus on the identification of factors that influence the practice

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