

## Knowledge, Attitude and Practices (KAP) Regarding Breastfeeding : A Community based Cross Sectional Study from Rural Uttrakhand

Sunil Kumar<sup>1</sup>, S.K. Jha<sup>2</sup>, Abhishek Singh<sup>3</sup>, C.M.S. Rawat<sup>4</sup>, Sadhana Awasthi<sup>5</sup>, Maher Bano<sup>6</sup>, Avinash Surana<sup>7</sup>

<sup>1</sup>Resident,<sup>4</sup>Professor and Head, <sup>5</sup>Associate Professor, <sup>6</sup>Assistant Professor, Department of Community Medicine, Government Medical College, Haldwani, Uttarakhand

<sup>2</sup>Associate Professor, Department of Community Medicine, BPS Govt Medical College, Khanpur Kalan, Haryana

<sup>3</sup>Assistant Professor, Department of Community Medicine, SHKM Govt. Medical College, Mewat, Haryana

<sup>7</sup>Assistant Director, Health, 19 Inf. Div., India

### Abstract :

**Introduction :** By assessing the knowledge, attitude and practices of lactating mothers regarding their child's feeding, an overview can be obtained about the areas, which need modifications and hence specific intervention strategies can be made to correct the same. **Objective:** 1.To analyze and ascertain knowledge, attitude and practices of breastfeeding among lactating mothers. 2.To compare the findings with the socio-demographic variables **Method :** The present cross-sectional study was undertaken in the rural field practice area of Department of Community Medicine, Government Medical College, Haldwani during June 2013 to August 2013. 250 lactating mothers having children in the age group 0-24 months were contacted and interviewed. Analysis was done using SPSS version 20 (IBM, Chicago, USA). **Results:** Only 37.3% mothers were aware of the fact that breastfeeding should be initiated within one hour. 98.4% mothers had knowledge that mother milk is best for the baby. 88% mothers did not have knowledge about the benefit of breastfeeding. Cow milk was the most prevalent form of pre-lacteal feed while honey was second most popular amongst the interviewed subjects. Illiterate mothers practiced demand feeding more as compared to women with higher education. **Conclusion:** Breast feeding was observed to be a universal practice in the study areas. However, illiterate mothers breast fed for longer duration and follow demand feeding. We need to reinforce emphasis on starting breast feeding within one hour of birth and giving colostrum.

**Key words:** KAP study, Rural, Breastfeeding, Lactating Mothers.

### Introduction :

Breastfeeding has been accepted as the most vital intervention for reducing infant mortality and ensuring optimal growth and development of children.<sup>[1]</sup>The benefits of breastfeeding for the health and wellbeing of the mother and baby are well documented. A recent trial has shown that early initiation of breastfeeding could reduce neonatal mortality by 22%.<sup>[2]</sup>The beneficial effects of breastfeeding depend upon correct breastfeeding practices. Initiation of breastfeeding after birth is considerably delayed in India, and in most cases the valuable colostrum is discarded before putting the child to breast.<sup>[3]</sup> It is recommended that babies should be exclusively breastfed for the first six months. Exclusive breastfeeding means that no other food or drink should be given to the baby for first six months.<sup>[4]</sup>

Poor infant feeding practices directly or indirectly contribute to under nutrition, morbidity and mortality in infants. Sometimes lack of awareness and not the poverty per se may be the likely cause of faulty infant feeding practices.<sup>[5]</sup>The breastfeeding and complementary feeding practice of a community are governed by its traditions, customs, knowledge, beliefs and socio cultural practices, since these aspects vary from one to another, quantification and understanding of their relative contribution to the emergence of malnutrition becomes important.

By assessing the knowledge, attitude and practices of lactating mothers regarding their child's feeding, an overview can be obtained about the areas which need modifications and hence specific intervention strategies can be made to correct the same.

**Objective :**

The present study was planned with an objective to analyze and ascertain knowledge, attitude and practices of breastfeeding among lactating mothers. An additional objective was to compare the findings with the socio-demographic variables.

**Method :**

The present cross-sectional study was undertaken in the rural field practice area of Department of Community Medicine, Government Medical College, Haldwani, from June 2013 to August 2013. Eligibility criteria were; the mother should be lactating and having children aged less than 2 years. All the eligible study subjects were planned to include in the survey. Study subjects were selected from the rural field practice area of Government Medical College, Haldwani. It has been adopted by this tertiary medical centre for rural training of under graduate and post graduate students in community medicine and for providing health services to the villagers.

According to the records of the Anganwadi workers, there were 287 such lactating mothers with children in the age group 0-24 months among the residents of rural field practice area of Government Medical College, Haldwani. About 37 eligible mothers were either non-cooperative (refused) or could not be interviewed despite making 3 visits to contact them, thus excluded from the study. Therefore remaining 250 eligible study subjects were contacted and interviewed.

Information was collected using a structured questionnaire. It was ensured that respondents understand the meaning of questions well. It included questions on socio demographic characteristics, child breast-feeding attributes, opinion about colostrum, time of initiating breast feeding and other relevant details. The questionnaire was pilot tested on 20 women and amended for clarity with the addition of some answer options and was modified accordingly.

All interviews and examinations were conducted by single person. Ethical approval was obtained prior to study. Informed consent was ensured from the study participants.

All the questionnaires were manually checked and edited for completeness and consistency and were then coded for computer entry. After compilation of collected data, analysis was done using Statistical Package for Social Sciences (SPSS), version 20 (IBM, Chicago, USA). The results were expressed as proportions. Chi-square ( $\chi^2$ ) test was applied to test the difference across the groups and  $p < 0.05$  was considered statistically significant.

**Results :**

The present cross sectional study, carried out in a rural community in Utrakhand, included a total of 250 lactating mothers having children aged less than 2 years. The study included 68.4% mothers with children in the age group  $>6$  months and 31.6% mothers with children in the age group  $< 6$  months. 22.8% of lactating mothers were illiterate and most (98%) were housewives. The maximum number of fathers (91.2%) were literate and 38.4% of them were working in low professional jobs. 63% of the respondents belonged to joint families, 37% were from nuclear families (Table 1).

**Table 1: Demographic profile of family**

Some Demographic & related variables	Frequency	Percentage
<b>1. Child Age ( months)</b>		
< 6 month	79	31.6
>6 month	171	68.4
<b>2. sex</b>		
Male	131	52.4
Female	119	47.6
<b>3. Religion</b>		
Hindu	208	83.2
Muslim	37	14.8
Sikh	5	2

<b>4. Caste</b>		
General	111	44.4
OBC	38	15.2
SC	101	40.4
<b>5. Mother education</b>		
Illiterate	57	22.8
Primary	72	28.8
High school	56	22.4
Intermediate	21	8.4
Graduate and above	44	17.6
<b>6. Father education</b>		
Illiterate	22	8.8
Primary	58	23.2
High school	74	29.6
Intermediate	43	17.2
Graduate and above	53	21.2
<b>7. Father occupation</b>		
Unskilled	81	32.4
Skill	96	38.4
Agriculture	27	10.8
Service	46	18.4
<b>8. Mother occupation</b>		
Housewife	245	98
Service	5	2

98.0% mothers had knowledge that mother milk is best for the baby. 88% mothers did not have knowledge about the benefit of breastfeeding to herself. 88.8% mothers believed that colostrum is good for the baby and 74.8% were of the opinion that pre-lacteal feed should not be given. 62.8% believed that breast feeding should be given on demand and 26.8% thought that should be given to fix time. Majority of lactating mothers thought that breastfeeding could be continued during menstruation, mother's illness and child illness. Only 37.2% mothers aware of the fact that breastfeeding should be initiated within one hour. 68.8% had fed colostrum to their last child. Half of the mothers had introduced complementary feed to the child at end of the six months (Table 2A&B)

Table 2 (A): Child breast-feeding attributes

Attribute	Number (%)
<b>Knowledge regarding to breastfeeding</b>	
Mother milk best	245( 98.0)
Other milk	5( 2.0)
<b>Time of initiating breast feeding Knowledge</b>	
Within 1 hr of birth	93( 37.2)
Between 1-4 hrs of birth	105( 42.0)
Within 24 hrs of birth	45 ( 18.0)
2 <sup>nd</sup> day onward	7(2.8)
<b>Practice ( breast feeding initiation last child) (n=158)</b>	
Within 1 hr of birth	59(37.4)
Between 1-4 hrs of birth	30(18.9)
Within 24 hrs of birth	33(20.9)
2 <sup>nd</sup> day On	36(22.8)
<b>Opinion about colostrums Attitude ( n=250)</b>	
Good	222( 88.8)
Bad	15(6.0)
Don't know	13( 5.2)
<b>Practices of feeding colostrums to last child (n= 250)</b>	
Within 1 hr	108(43.2)
Within 24 hrs	38( 15.2)
Within 2 days	26( 10.4)
No given	78( 31.2)
<b>Attitude regarding to prelacteal feed</b>	
Not be given	187( 74.8)

Should be given	63( 25.2)
<b>Exclusive breast feeding for 6 months duration of EBF</b>	
0-6 months	224( 89.6)
>6 month	26( 10.4 )
<b>Frequency of breast feeding in day</b>	
3-10 time	229( 91.6)
>10 time	21 ( 8.4 )
<b>Frequency of night breast feeding</b>	
1-4 time	146( 58.4)
4-9 time	104( 41.6)
<b>Complementary feed age Knowledge</b>	
3-6 months	26 ( 10.4)
>7 months	223( 89.6)
<b>Practice of introduction of complementary feed to last child (n=250)</b>	
3-6 month	115( 46.0)
>7 months	135(54.0)
<b>Methods of artificial feeding</b>	
Bottle	124( 49.6)
Katori	51( 20.4)
Cup	3( 1.2)

Table 3 shows the relation between breast feeding and educational status of the lactating mothers. 105 (42%) of the children were put to breast 1-24 hours while 93 (37.2%) were given their first feed within one hour of birth. Interval between first

**Table2 (B): Mothers attribute regarding to child breast-feeding**

Attribute	Number (%)
<b>Duration of breast feeding</b>	
<b>Attitude</b>	
6 months	150(60.0)
Upto 12 months	30( 12.0)
Upto 24 months	70 ( 28.0)
<b>Practices of breast feeding last child (n=159)</b>	
6 months	49 ( 30.8)
Upto 12 months	53 ( 33.3)
Upto 24 months	57 ( 35.8)
<b>Continuation of breastfeeding during menstruation</b>	
<b>Attitude</b>	
Good	243 ( 97.2)
Bad	7 ( 2.8)
<b>Continuation of breastfeeding during mother illness</b>	
<b>Attitude</b>	
Good	192( 76.8)
Bad	58 ( 23.2)
<b>Continuation of breastfeeding during baby illness</b>	
<b>Attitude</b>	
Good	236( 94.4)
Bad	14( 5.6)
<b>breast feeding benefit to mother Knowledge</b>	
Known	30( 12.0)
Do not know	220( 88.0)

feed was significantly related to the educational status of the mother. Literate mothers were more likely to feed their infants early as compared to illiterate mothers (p<0.0001).

**Table 3: First breast feeding initiation relation to educational status of lactating mothers**

Educational status	First milk given				Total
	0-1 hrs	1-24 Hrs	24-48 Hrs	48-72 Hrs	
Illiterate	4	4	42	7	57
Primary	28	43	1	0	72
High School	27	27	2	0	56
Intermediate	12	9	0	0	21
Graduate and Above	22	22	0	0	44
Total	93	105	45	7	250

Chi-square=194.310,df=12,p<0.001

It was observed that 74.8% of the lactating mothers did not believe in giving pre-lacteal feeds. Cow milk which is preferred than honey was the most prevalent form while honey was second most popular

form of pre-lacteal feed amongst the interviewed subjects. The relation between educational status of mothers and pre-lacteal feeds is shown in (Table 4).

**Table 4: Pre-lacteal feeds in relation to educational status of lactating mother**

Educational status	Pre-lacteal feed		Total
	Yes	No	
Illiterate	28	29	57
Primary	5	67	72
High School	14	42	56
Intermediate	3	18	21
Graduate And Above	13	31	44
Total	63	187	250

Chi-square=31.805, df=4,p<0.001

It was found that educated mothers were giving less pre lacteal feed as compare to illiterate mothers and this difference was found to be statistically significant. Majority of the lactating

mothers 62.8% breast fed their children on demand while 26.8% at fix time. It was observed that illiterate mothers practiced demand feeding more as compared to women with higher education (

**Table 5: Breast feeding attitude in relation to educational status of lactating mothers**

Educational	Status when breast feeding should be given			Total
	On Demand	At Fix Time	Both	
Illiterate	41	8	8	57
Primary	48	18	6	72
High School	34	20	2	56
Intermediate	12	8	1	21
Graduate And Above	22	13	9	44
Total	157	67	26	250

Chi-sure=17.008,df= 8, p<0.030



## Discussion:

In the present study, 37.2% of lactating mothers had the knowledge about initiation of breast feeding within 1 hour of birth whereas 37.3% practiced it. 88.8% of mothers had good opinion about colostrums. Similar findings were reported by Durge et al 1996 that 83.59% had fed colostrums.<sup>[6]</sup> Subbaiah and Nanthini, in their study conducted on 100 postnatal mother's report that 91 of the population knew that they should feed the baby with colostrums but only 50 of the population knew the reason for feeding colostrums.<sup>[7]</sup> This was similar to the study of Das and Ahmed, who reported that most of the Bangladeshi rural mothers did not have correct knowledge about exclusive breastfeeding.<sup>[8]</sup>

WHO recommends 6 months of exclusive breastfeeding for infants but, in our study only 38% of the mothers knew that exclusive breastfeeding should be given for 6 months. Studies show that the mean duration of exclusive breast-feeding is estimated to be more than six months in many states in India, ranging from 6.7 months in Tamil Nadu to 10.8 months in Andhra Pradesh. Poverty and ignorance are the main reasons for this practice, which is one of the major causes of malnutrition among infants.<sup>[9]</sup>

In our study it was found that 42.0% and 37.2% lactating mothers had knowledge about early initiation breast feeding (within one hour and 1-4 hours respectively) while various Indian studies have noted higher knowledge about early initiation of breastfeeding ranging from 87- 92%.<sup>[10-13]</sup>

It was observed in our study that 25.2% of the lactating mothers were giving pre lacteal feed. The findings of the present study were similar with the findings of Purnima Bhale and Shikhar Jain (1999)<sup>[14]</sup> S. Kishore and B. S. Garg (1999)<sup>[15]</sup> and V. R. Parmar et al (2000)<sup>[16]</sup>, who found prevalence of pre lacteal feeding as 43.96%, 45% and 42% respectively. It was observed that majority 62.8% lactating mothers fed their babies on demand, this was low in comparison to S. K. Bandopadhyay et al (2000)<sup>[17]</sup> where 84.5% mothers offered demand feeding to the babies.

## Conclusion:

Breast feeding was observed to be a universal practice in the study areas and accepted to be the

healthiest food for infants. Literate and illiterate lactating mothers do believe in giving colostrum and literate mothers are less likely to give pre-lacteal feed. However, illiterate mothers breast fed for longer duration and follow demand feeding. Thus we need to reinforce the advantage of breast feeding to both mothers and babies with emphasis on starting breast feeding within one hour of birth and giving colostrum.

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