



## KNOWLEDGE AND PRACTICES REGARDING BREASTFEEDING AND COMPLEMENTARY FEEDING AMONG MIGRANT MOTHERS OF HALDWANI BLOCK, DISTRICT NAINITAL, UTTARAKHAND

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**(ABSTRACT)** **INTRODUCTION:** Breast milk is the ideal food for the baby & it offers various benefits to both mother & baby. Exclusive breast feeding for 6 months & continued feeding after that for at least up to 2 years of age can prevent mortality among children to a great extent on a global level.

**MATERIAL & METHOD:** A cross-sectional study was conducted from October 2016 to December 2016 among migrant mothers having child less than two years of age in two of the selected clusters. Data was collected using a structured questionnaire & analysed using SPSS 17.

**RESULTS:** A total of 137 mothers having child less than 2 years were included in the study. Only 10.9% mothers knew that the time of initiation of breastfeeding should be within ½ to 1 hour after birth. Only 45.3% knew that complementary feeding should be started after 6 months of age. 38% initiated breastfeeding within one hour of birth, 42.3% mothers offered pre-lacteal feed to the baby. Exclusive breastfeeding was followed by 40.9% of mothers. Complementary feeding was started after 6 months by 40.9% of the mothers.

**CONCLUSION:** Migrant mothers had low level of knowledge about breastfeeding & complementary feeding. Also, practices of the mothers regarding breast feeding were suboptimal.

**KEYWORDS :** Migrant Mothers, Colostrum, Exclusive breast feeding, Complementary feeding

### INTRODUCTION

The rearing practices adopted by the family determines the health of the baby after birth to a great extent<sup>1</sup>. Breast milk is the ideal food for the baby & it offers various benefits to both child & mother<sup>2</sup>. Exclusive breast feeding for 6 months & continued feeding after that for at least up to 2 year of age can prevent mortality among children to a great extent on a global level.

A great asset in India is that an average Indian mother, although poor in nutritional status, has a remarkable ability to breast-feed her infant for prolonged periods. Longitudinal and cross-sectional studies indicate that poor Indian women secrete as much as 400 to 600 ml of milk per day during the first year. No other food is required to be given until 6 months after birth. At the age of 6 months, breast milk should be supplemented by additional foods rich in protein and other nutrients (e.g., animal milk, soft-cooked mashed vegetables, etc.). These are called supplementary foods which should be introduced very gradually in small amounts<sup>3</sup>.

Breastfeeding practices are however influenced by a number of factors in India e.g. education & working status of mother, socio-cultural & religious factors etc<sup>4</sup>. Delayed initiation of feeding, giving pre-lacteal feeds, discarding colostrums & not practicing exclusive breast feeding are commonly found practices widely prevalent in India. Since no such study has been done on migrants in this area so far, so with this background, this study was conducted to assess knowledge & practices regarding breastfeeding & complementary feeding among migrant mothers of Haldwani Block, District Nainital, Uttarakhand.

### MATERIAL AND METHODS

A population based cross-sectional study was conducted in the settlements of sand extraction labourers in the Haldwani block of district Nainital alongside the river Gaula. The sand extraction work employs a large number of seasonal migrants as labourers. They work alongside the 12 release gates of Gaula and reside in their temporary huts there. Out of the twelve release gates (clusters) two gates were selected by simple random sampling & then complete enumeration of the selected cluster was done. Study population comprised of all migrant mothers having children up to 2 years of age and who were willing to participate in the study. A predesigned structured

questionnaire was used to interview the study subjects. The information on socio-demographic factors, knowledge & practices regarding breast feeding & complementary feeding was gained. The study was conducted from October 2016 to December 2016.

### OBJECTIVES :

**The objectives of the study were :**

- To assess the knowledge of migrant mothers regarding breast feeding & complementary feeding.
- To know about breast feeding & complementary feeding practices among them.
- To find out association between exclusive breastfeeding practices & background characteristics of migrant mothers.

Data analysis: Data were entered in Microsoft Excel and analyzed using SPSS version 17

### RESULTS:-

A total of 137 mothers having child less than 2 years were included in the study. The mean age of the participants was 25.42±4.12 years. The mean age of marriage was 16.55±2.52 years, the minimum being 13 years. Only 4.4% were educated up to primary school and 2.2% up to middle school while remaining 93.4% were illiterate. Majority (59.9%) of the participants were housewives. Regarding the children of the mothers studied 40.9% were of 1st or 2nd birth order, 42.3% were of 3rd or 4th birth order and 16.8% were of birth order 5 or more. 57.7% of children were male.

As shown in table 1, all the mothers knew that breastfeeding is best nutrition for the baby. Majority (86.9%) of the mother had the knowledge that breastfeeding leads to growth and development of child while only 29.9% knew that it protects child from diseases. 100% of mothers said that it is free of cost, 44.5% mothers said that it strengthens bond between mother and child while 5.1% said that it protects mother from cancers. Only 10.9% mothers knew that the time of initiation of breastfeeding should be within ½ to 1 hour after birth. Around 18.2% mothers knew that colostrum feeding is nutritious for the baby while only 8.8% mothers knew the duration of exclusive breastfeeding. Regarding pre lacteal feed, 40.9% mothers said that it should be given & whereas 37.2% mothers had no idea regarding same.

Variables	No.	Percent
<b>The best nutrition for the baby</b>		
Breastfeeding	137	100
Artificial feeding	0	0
<b>Advantages of breastfeeding for the child</b>		
Growth and development of child	119	86.9
Protects child from diseases	41	29.9
<b>Advantages of breastfeeding for the mother</b>		
Free of cost	137	100
Strengthen the bond between mother and child	61	44.5
Protects mother from cancer	7	5.1
<b>Time of initiation of breastfeeding (Within ½ to 1 hour after birth)</b>		
Know	15	10.9
Don't know	122	89.1
<b>Duration of exclusive breastfeeding (6 months)</b>		
Know	12	8.8
Don't know	125	91.2
<b>Colostrum feeding is nutritious</b>		
Know	25	18.2
Don't know	112	81.8
<b>Pre-lacteal feed should be given</b>		
Yes	56	40.9
No	30	21.9
Don't know	51	37.2

Regarding knowledge about complementary feeding, majority (45.3%) said that suitable age of baby to start complementary feeding is after 6 months, 34.3% said between 4-6 months while 20.4% had no idea about same. More than two third (69.3%) of the mothers knew that it should be started with mashed cereals. Nearly two third (65.7%) of the mothers reported that the baby should be weaned completely from the breastmilk at the age of 2 years, 16.8% said one and half years and 17.5% said one year[Table 2].

Variables	No.	Percent
<b>Suitable age of baby to start complementary feeding</b>		
4-6 months	47	34.3
After 6 months	62	45.3
Don't know	28	20.4
<b>Type of food used for starting complementary feeding</b>		
Mashed cereals	95	69.3
Animal milk	26	19
Tea	9	6.6
Mashed banana	7	5.1
<b>Discontinuation of breastfeeding</b>		
At 1 years	24	17.5
1.5 years	23	16.8
2 years	90	65.7

Table 3 presents the percentage of mothers regarding the breastfeeding practices, only 38% initiated breastfeeding within one hour of birth, 42.3% mothers offered pre-lacteal feed to the baby before initiating lactation, 46.7% mothers fed colostrum to their babies. Exclusive breastfeeding was followed by 40.9% of mothers. Majority (82.5%) of the mothers fed their babies on demand.40.9% mothers initiated complementary feeding after 6 months of age and mashed cereal was used by 67.1% mothers for same

Variables	No.	Percent
<b>Time of initiation of breastfeeding</b>		
Within ½ - 1 hour afterbirth	52	38
Within 24 hour	32	23.4
After 24 hour	53	38.7
<b>Pre-lacteal feeds</b>		
Given	58	42.3
Not given	79	57.7
<b>Colostrum feeding</b>		
Fed	64	46.7
Discarded	73	53.3

<b>Exclusive breastfeeding for 6 months</b>		
Yes	56	40.9
No	81	59.1
<b>Feeding on demand</b>		
Yes	113	82.5
No	24	17.5
<b>Complementary feeding started at</b>		
<4 months	41	29.9
4-6 months	40	29.2
>6 months	56	40.9
<b>Type of food given for starting complementary feeding</b>		
Mashed cereals	92	67.1
Animal milk	33	24.1
Mashed banana	8	5.8
Tea	4	3

Table 4 reveals that being a non working mother, living in joint family and having hospital delivery was found to be significantly associated with higher percentage of mothers following exclusive breastfeeding. Literates were found to be practising exclusive breastfeeding more as compared to illiterates however this association was not found to be statistically significant.

Variables	No.	Exclusive breastfeeding		p Value
		Yes No. (%)	No No. (%)	
<b>Mothers' education</b>				
Illiterate	128	50 (39.1)	78 (60.9)	0.16*
Literate	9	6 (66.7)	3 (33.3)	
<b>Mothers' occupation</b>				
Not working	82	47 (57.3)	35 (42.7)	0.001
Working	55	9 (16.4)	46 (83.6)	
<b>Family type</b>				
Joint	15	12 (80)	3 (20)	0.001
Nuclear	122	44 (36.1)	78 (63.9)	
<b>Place of delivery</b>				
Hospital	51	30 (58.8)	21 (41.2)	0.001
Home	86	26 (30.2)	60 (69.8)	

\* Fisher's Exact Test

## DISCUSSION

### Knowledge regarding breastfeeding

In our study, it was found that all the mothers knew that breastfeeding is the best nutritional source for baby. Similar findings were reported by Mohammed S.E. et al<sup>1</sup> in their study. Only 29.9% & 44.5% mothers knew that breastfeeding protects child from diseases & strengthen the bond between mother and child. This is very low as compared to that reported by Mohammed S.E. et al<sup>5</sup> in their study (97.7% & 76.8 respectively).

Only 10.9% mothers in our study knew that breast feeding should be initiated within ½ to 1hr of birth. Similar findings were reported by Chaudhury et al<sup>6</sup>. Only 8.8% mothers knew about duration of exclusive breast feeding & only 18.2% knew that colostrum is nutritious for baby. This is again very less as compared to findings of Mohammed S.E et al<sup>5</sup> & Chaudhury et al<sup>6</sup> (87.6% & 25% respectively). These findings may be due to higher percentage of illiterates in our study.

### Knowledge about complementary feeding

Our study showed that majority (69.3%) of mothers considered mashed cereal as suitable food for complementary feeding. This is very high as compared to findings of Mohammed S.E. et al<sup>1</sup> (14%). This may be due to the fact that cereals are the staple food of Indian households. 45.3 % mothers in our study knew that suitable age to start complementary feeding is after 6 months. This is similar as compared to findings of Kishore et al<sup>7</sup> (44.6%). Majority (65.7%) mothers in our study knew that weaning from breast milk should be done at the age of 2 years compared to only 50.2% as reported by Mohammed .S.E et al<sup>5</sup>.

### Mothers' practice of breastfeeding & complementary feeding

In our study, only 38% initiated breastfeeding within one hour of birth. Shwetha R et al<sup>1</sup> reported a similar finding(40.5%). Wagh et al<sup>1</sup> & Maiti A et al<sup>8</sup>however reported a much higher percentage for same(80.48% & 70.29% respectively). 40.9% mothers breast fed

exclusively for 6 months in our study which is similar to that reported by Madhu K et al<sup>9</sup>(40%). However this is high as compared to 32% & 34% as reported by Mohammed S.E. et al<sup>5</sup> & Radhakrishnan S et al<sup>10</sup> respectively. Maiti A et al<sup>8</sup> however reported a much higher percentage for same(60.8%). However, 59.1% mothers did not practice exclusive breast feeding because they think that mother's milk is not sufficient to satisfy the thirst of baby and should be given water in addition to mother's milk. 82.5% mothers in our study fed their babies on demand which is less as compared to 95.8% as reported by Mohammed S.E. et al<sup>5</sup>. In our study, in practice, 46.7% of infants had received colostrums which is very less as that reported by Mohammed S.E. et al<sup>5</sup> & Maiti A et al<sup>8</sup> (74% & 74.8%). 53.3% discarded colostrums in our study which is much higher than that reported by Shwetha R et al<sup>4</sup> (28.3%). Out of 137 mothers, 42.3% gave pre-lacteal feed; this finding approximate with what reported by Mohammed S.E. et al<sup>5</sup>(42.7%); however Wagh et al<sup>1</sup> reported a lower percentage for same(15.85%) & Shwetha R et al<sup>4</sup> reported a higher percentage for same(58.2%).

Majority (40.9%) mothers started complementary feeding after 6 months of age in our study. This is similar to that reported by Swetha R et al<sup>4</sup> in their study(41.1%). Mashed cereals (67.1%) was found to be the predominant food used to start complementary feeding in our study. This is very high as compared to that reported by Maiti A<sup>8</sup> in their study (23.42% home made food).

### Conclusion & Recommendations

Based on the findings of the present study, it can be concluded that migrant mothers had low level of knowledge about breastfeeding & complementary feeding. Also, practices of the mothers regarding breast feeding were suboptimal. This might be due to a low level of education. A significant relationship was obtained between exclusive breast feeding & mothers' occupation, family type & place of delivery.

Breast feeding is a vital part of sustainable development and a non-negotiable component of global action to end malnutrition. Exclusive and continued breast feeding is only possible by cooperation and collaboration across sectors and generation, Let's campaign for a generation.

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