# "Breast feeding practice immediately after birth: A study in a tertiary care hospital, Dhaka, Bangladesh"

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Abstract: Human milk is a bioactive fluid that evolves from colostrum to mature milk as the infant matures. Breast milk is the unique source of nutrition that plays an important role in the growth, development and survival of infants. There is still a lack of knowledge in newborn care and particularly about the appropriate interventions including breastfeeding management. Exclusive breastfeeding practice for six months is not so hopeful in South East Asia region and also in our country. The aim of this study is to identify the socio-demographic profile of the mothers and their relation with the time of initiation of breastfeeding. It was a cross-sectional study conducted in the Post natal ward of Gynae and Obs Department, Dhaka Medical College, Dhaka from April 2008- September 2008. A total of 390 newborn babies of 0-7 day's age old were selected purposively. Data were collected from mothers of the selected babies by structured questionnaire. Among the total 390 mothers 121 (31%) started breastfeeding in the first hour of delivery, 231 (59.2 %) started within 1-12 hours, 30 (7.7%) within 12-24 hours and 8 (2.1%) within 48 hours. Prelacteal feeding was given to 118 (30.3 %) babies and the form of prelacteal feeding were misry water (33.9 %), artificial milk (30.5 %), honey (18.6%), plain water (12.7%) and cow's milk (4.2%). Colostrum and exclusive breastfeeding was given to 379 (97.2%) and 276 (70.8%) babies respectively. Exclusive breastfeeding was given significantly more (p < 0.05) in the group where birth spacing was > 2 years. Significantly higher number of mother with no education gave breastfeeding within one hour (p < 0.05). 93.8 % mothers were housewife and 6.2 % were service holder. Ante-natal check-up was given in 77.4 % of mothers. Medical problem was present in 12.6 % of mothers. Significantly less number of mother with medical problem gave colostrum to their babies (p<0.05). Maternal fever was present in 34.4 % mothers. Prelacteal feeding was given more and exclusive breastfeeding were given less to babies mothers with maternal fever (p < 0.05). 33.6 % babies were born by vaginal delivery, 3.1 % by instrumental delivery, and 63.3 % by C/S. Significantly higher number of mothers with vaginal delivery gave breast feeding within one hour of delivery and exclusive breastfeeding than instrumental or C/S deliveries (p < 0.05). Labour was prolonged in 29.5 % of delivery. Less number of mothers had prolonged labour started breastfeeding within  $1^{st}$  hour and gave colostrum (p< 0.05). The present study had 3.6 % newborn with birth weight < 2kg, 79% with 2-3 kg and 17.4 % with > 3 kg. Significantly more number of low birth weight babies were given breastfeeding within 1 hour, colostrum, exclusive breastfeeding and less number of babies were given prelacteal feeding than other babies (p<0.05). Male babies was 49.7% and female babies 50.3 % significantly less number of babies male babies were given colostrum than female babies (p<0.05). The study concludes that 31% mothers started breastfeeding their babies within 1 hour of deliveries, 59.2% started within 1-12 hours of birth, 7.7% within 12-24 hours and 2.1% within 24-48 hours. Colostrum was given by 97.2%, prelacteal feeding by 30.3% and exclusive breastfeeding by 70.8% of mothers. Mothers with delivery and without prolonged labour gave breastfeeding vaginal earlier and continued exclusive breastfeeding. More babies with low birth weight were given colostrum and breastfeeding earlier and exclusively.

Key words: Breastfeeding, Colostrum, prelacteal, human milk

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## I. Introduction

Human milk, in addition to its numerous nutrients that make it an ideal food source for the growing term infant, is a bioactive fluid that evolves from colostrum to mature milk as the infant matures. This bioactive fluid contains numerous factors and live cells that, in concert, promote the growth and well-being of the breastfeeding infant. Current research reveals that commercial formula clearly cannot replicate all of the valuable properties that are inherent in human milk.<sup>1</sup> Breast milk is the unique source of nutrition that plays an important role in the growth, development and survival of infants. The benefits of breastfeeding are well established. Breastfeeding is promoted internationally as the preferred method of feeding infants upto 4-6 months and continued up to two years with the addition of home cooked food. In Bangladesh, only 14 per cent of infants were exclusively breastfed up to 3 months.<sup>2</sup> There are estimated 4 million neonatal deaths world wide each year. Moreover it is estimated to account for 40% of under-five deaths and two-thirds of infant's deaths. A vast majority of these deaths occur in developing countries where essential newborn care has not been developed properly. The essential newborn care includes cleanliness, thermal protection, early and exclusive breastfeeding, initiation of breathing (resuscitation), eye care, and immunization, management of newborn illness and care of preterm and or low birth weight infant.<sup>3</sup> Early newborn deaths in many countries represent a substantial proportion of infant mortality, often over 30%. These early deaths and the severe sequelae that may develop in some of the babies, who survive, can be greatly reduced through appropriate preventive, diagnostic or early therapeutic interventions. These interventions do not need sophisticated technology. However, there is still a lack of knowledge in newborn care and particularly about breastfeeding management.<sup>4</sup> Breast milk is thought to be the best form of nutrition for neonates and infants. The properties of human milk facilitate the transition of life from in utero to exterior. This dynamic fluid provides a diverse array of bioactive substances to the developing infant during critical periods of brain, immune, and guts development.<sup>1</sup> Clinicians can play a crucial role in a mother's decision to breastfeed and can facilitate her success in lactation. Although a mother may not be aware of the evidence indicating that breast milk contributes to her baby's short- and long-term wellbeing, she has developed certain attitudes and cultural beliefs about breastfeeding. The issue of bonding between mother and newborn may be a strong factor; however, stronger cultural or societal barriers may result in the decision to formula feed. Such issues must be understood for successful counseling. Wagner, Graham, Hope (2006) stated that the mother makes her decision regarding breastfeeding prior to delivery in more than 90% of cases; therefore, her choice of infant nutrition should be discussed at the starting of the second trimester and continue as part of an ongoing dialogue during each obstetric visit.<sup>1</sup> Breast-milk is not just a food for babies. It is a living fluid, which protects a baby against infections. For the first year or so of life, a baby's immune system is not fully developed and cannot fight infections as well as an older child's or adults. So a baby needs to be protected by his mother. Breast-milk contains white blood cells and a number of anti-infective factors, which help to protect a baby against infection. Breast-milk also contains antibodies against infections which the mother has had in the past.

Exclusive breastfeeding practice for six months is not so hopeful in South East Asia region and also our country. In South East Asia exclusive breastfeeding rate upto 6 months is 2.5% to 23.4%. In India it is 37%, in Nepal 69%, in Srilanka 54%, in Maldives 10%, in Myanmar 11%, in Indonesia 42% and in Thailand only 4%.<sup>7</sup>. There is no improvement in exclusive breastfeeding rate over the last few years in Bangladesh. It was 46% in 2004 and 43% in 2007. Among children less than two months 64% are being exclusively breastfed and remaining are being given water, other milk and liquids along with breast milk. On the other hand 91 % children age 20-23 months are still receiving breast milk.<sup>5</sup> Khanam et al (2007) showed that only 16.4% infant's mother initiated breastfeeding within 1 hour of birth, 69.1% within 24 hours and 14.5% after 24 hours.<sup>11</sup> Talukder (1996) described that great erosion in the practice of breastfeeding was recorded at the time the campaign for the protection, promotion and support of breastfeeding was just beginning in 1989. Colostrum, by tradition, is largely discarded in Bangladesh and prelacteal feeds are given to all newborn babies. Initiation of breastfeeding by most mothers takes place on the 3<sup>rd</sup> or 4<sup>th</sup> day; exclusive breastfeeding for 6 months is almost non-existent and there is high prevalence of bottle feeding even in the villages in the country. Unethical marketing of formula feed is prevailing widely in the market and health care providers often prescribe them. Complementary feeding practices are unsatisfactory. There is withdrawal of breast-feeding during illness, especially during diarrhoea and ARI; and there is poor nutrition of mothers. All these factors suggest that, there are improper breast-feeding practices in Bangladesh.<sup>6</sup> Any fluid other than breast milk given first time to a newborn is defined as pre-lacteal feeding.<sup>13</sup> Pre-lacteal feeds are given under the belief that they act as laxatives, cleansing agents or dehydrating agents or as a means of clearing meconium. Unfortunately mothers are not aware that pre-lacteals could be a source of contamination too. A study in India observed that the prelacteals included plain water (48.3%), jaggery with ghee/oil (46.2%), sugar water (28.2%), gripe water (24.1%), jaggery water (20.7%), omum (ajwain) water (6.8%), milk (5.4%), honey (2%), tea (.7%), omum (ajwain) with ghee/oil (.3%).<sup>13</sup> Data were collected on 473 infants aged less than 2 years during April-August 1995 from 14 villages of Matlab thana of Bangladesh.<sup>13</sup> Only 7% of the infants were given breast milk as a first meal. Honey

(56%), mustard oil (31%) and water with sugar (4%) were found as the most frequently used pre-lacteal liquid. Surprisingly, 9% of infants did not receive any food within 24 hours of birth. In most instances, grand mothers (44%) initiated the feeding followed by a dai (traditional birth attendant) (25%). This study confirms that exclusive breast-feeding was almost non-existent in rural Bangladesh.<sup>6</sup> In most instances poor quality liquids are given to a newborn that increase the risk of introducing early infections.<sup>6</sup>

In Bangladesh, immediate breastfeeding was not traditionally practiced, and exclusive breastfeeding was virtually nonexistent. Mothers tended to discard colostrum (first milk), substituting prelacteal feeds such as sugar water, honey, or oil instead of breast milk as the first feed for all newborn babies. Initiation of breastfeeding by most mothers took place on the third or fourth day. In the event of illness, mothers would cease breastfeeding. Complementary feeding practices were also unsatisfactory, consisting of bulky, energy-thin feeds, with weaning occurring either too early or too late. Such was the state of affairs in Bangladesh in 1979, when the World Health Organization (WHO) and UNICEF held a meeting in Geneva for the first time to emphasize the importance of breastfeeding-the first in a series of important initiatives to address this issue and other child health and nutrition concerns. Before 1980, there was hardly any discussion within the medical profession in Bangladesh of the importance of breastfeeding, let alone of a public health intervention to promote it. But the leadership of global agencies on this important issue had a significant impact on breastfeeding policy and practice in Bangladesh. This case study, describes the origins of the breastfeeding movement in Bangladesh, the government of Bangladesh's support for the initiative, and the partnership that was established among the health professions, United Nations (UN) agencies, bilateral agencies, and the World Bank to change breastfeeding practices. The introduction of breastfeeding contributed to better health and nutritional status among the nation's children within a decade.<sup>9</sup>

## **II.** Objectives

#### a) General Objective:

To determine the practice of initiation of breast feeding just after birth among infants in post natal ward in Dhaka Medical College Hospital.

#### b) Specific objective

To identify the socio-demographic profile of the mothers and their relation with the time of initiation of breastfeeding.

### **III.** Methodology and Materials

A cross sectional descriptive study conducted in the Department of Gynae and Obs (postnatal ward) Dhaka Medical College Hospital, Dhaka during April 2008 – September 2008. All healthy term newborn babies 0-7 day's age born at Dhaka Medical College Hospital, and admitted in postnatal word during the study period were selected as a study subjects. Considering inclusion criteria, we selected 379 study subjects. At the onset of selection of cases, a detailed history of mother about antenatal, natal & postnatal period, history and physical examination of newborn were performed. Neonate who fulfilled the inclusion criteria were enrolled in this study. With prior consent and after explaining the purpose and procedure of the study to the parents, data were collected and recorded in the preformed data collection sheet. All the clinical and laboratory data collected were checked visually and edited meticulously. The data were then entered into the computer based software. SPSS for windows version 12 (Statistical Package for Social Study) were used for analysis of data. Result was presented as frequency, percentage, means (±SD). Comparison was done by chi-square test for qualitative data. Bar diagram, pie chart was constructed as necessary for easy visual impression. Written informed consent was taken from each mother. Anonymity and confidentiality were strictly warranted. Sample size was calculated

Sample size:  $n=Z^2.pq/d^2$ 

Where, n = the desired sample size.

z = the standard normal deviate set at 1.96 which corresponds to the 95 % confidence level.

p = the prevalence (40% = 0.40)

$$q = 1 - p. = 0.60$$

d = the degree of accuracy desired (absolute precision), set at 5% i.e. 0.05.

So, n=368

**Inclusion criteria**: i) all healthy term neonate of healthy mother ii) Age 0 to 7 days iii) Irrespective of mode of delivery

**Exclusion criteria:** i) Sick neonate- suffering from perinatal asphyxia, septicemia, birth trauma, convulsion, preterm very low birth weight (PVLBW) baby. ii) Newborn with congenital anomaly iii) Baby of Very Sick mother- Suffering from Eclamsia, PPH, Chronic illness (Congenital Heart disease, cor-pulmonale, Bronchial Asthma), psychosis.

## **IV. Results**

Result was presented as frequency, percentage, means ( $\pm$ SD). Comparison was done by chi-square test for qualitative data. Relation between occupation of mother and initiation of breast feeding, ante-natal check up prolonged rupture of membrane, feeding problem, multi-pregnancies and whether prelacteal feeding, colostrum and exclusive breast feeding had no positive association.



**Figure 1:** Number of mothers by age (n=379)

Figure shows that among the mothers, 21-25 years age group had the highest number of participants (47.9%) followed by 15-20 years group (22.8%) and 26-30 years group (20.3%). The least number (9%) was included in >30 years group

Level of education	Frequency	Percent
No education	116	29.7
Primary	154	39.5
Secondary	103	26.4
Higher Secondary & above	17	4.4
Total	390	100.0
Whether colostrum given	Frequency	Percent
Yes	379	97.2
No	11	2.8
Total	390	100.0
Types of prelacteal feeding	Frequency	Percent
Honey	22	18.6
Misry Water	40	33.9
Plain Water	15	12.7
Cows Milk	5	4.2
Artificial Milk	36	30.5
Total	118	100.0

Table-I: Distribution of new born by education and feeding practice

Table shows that most of the mothers of the children have primary education. Almost all of the newborns (97.2%) were given colostrum and only a few were not given (2.8%). is misry water (33.9%) and closely followed by formul milk (30.5%). Other forms of prelacteal feedings were honey (18.6%), plain water (12.7%), and cow's milk (4.2%).

Birth spacing (in years)		Freq	uency		Pe	rcent
<2 years				49		22.4
$\geq 2$ years				170		77.6
Total				219		100.0
		Birth spacing		Chi-square	df	P value
		<2	≥2	value		
Breast feeding started at	1 hour	19	50	1.865	3	.601
	12 hrs.	25	101			
	24 hrs	4	17			
	48 hrs.	1	2			
Prelacteal feeding given	Yes	14	56	.334	1	.563
	No	35	114			
Colostrum given	Yes	48	165	.116	1	.734
	No	1	5			
Exclusive breast feeding	Yes	41	112	5.718	1	.017
given	No	8	58			

Table 2: Distribution of mothers by birth spacing and association with selected components (n=379)

Table shows that birth spacing  $\geq 2$  years was present in 77.6% of participating mothers and <2 years was present in 22.4% of mothers. We observed that differences of age of the newborn when breast feeding was first started among the groups according to birth spacing were not statistically significant (p>0.05). The differences of whether prelacteal feeding and colostrum were given among the groups were not also significant (p>0.05). While exclusive breast feeding was significantly more (p<0.05) in the group where birth spacing was more than  $\geq 2$  years

 Table 4: Distribution of mothers by medical problem (sore/crack nipple / flat and inverted nipple) and association with selected conditions (n=379)

Medical problem	Frequency	Percent					
Yes	49	12.6					
No	341	87.4					
Total	390	100.0					
		Medical problem		Chi-square	df		P
		yes	No	value			value
Breast feeding started at	1 hour	22	22 99 5.420		3	.143	
	12 hrs.	24	207				
	24 hrs	2	28				
	48 hrs.	1	7				
Prelacteal feeding given	Yes	12	106	.883		1	.347
	N-	27	225				
	NO	37	235				
Colostrum given	Yes	45	334	5.836		1	.037
	No	4	7				
Exclusive breast feeding given	Yes	38	238	1.246		1	.264

Table shows that medical problem was present in only 12.6% of mothers and rest of the mothers (87.4%) had no medical problem. WE also observed that differences of age of the newborn when breast feeding was first started among the groups according to medical problem present in mother were not statistically significant (p>0.05). The differences of whether prelacteal feeding and exclusive breast feeding were given among the groups were not also significant (p>0.05). However significantly (p<0.05) higher number of mothers who did not have any medical problem gave colostrum to their baby

Maternal fever	Frequency	Percent				
Yes	134	34.	4			
No	256	65.	5			
Total	390	100.	)			
		Maternal fever		Chi-	df	P value
		yes	No	square value		
Breast feeding started at	1 hour	3	2 89	6.018	3	.111
	12 hrs.	8	5 146			
	24 hrs	1	4 16			
	48 hrs.		3 5			
Prelacteal feeding given	Yes	5	2 66	7.071	1	.008
	No	8	2 190			
Colostrum given	Yes	13	2 247	1.313	1	.344
	No		2 9			
Exclusive breast feeding given	Yes	8	5 191	5.311	1	.021
	No	4	9 65			

**Table 5:** Distribution of mothers by maternal fever with association with selected conditions (n=379)

Table shows that almost two-third of the mother (65.5%) had no fever and 34.4% had no fever. We also observed that the age of the newborn when breast feeding first started and colostrum given was not significantly affected by maternal fever (p>0.05). While exclusive breast feeding was given by more mothers who had no fever (p<0.05) and prelacteal feeding was given by more mothers who had fever (<0.05).

**Table 6:** Distribution of mothers by mode of delivery with association with selected conditions (n=379)

Mode of delivery	Frequency	Percent					
Vaginal Delivery	131	33.6					
Forcep delivery	12	3.1					
C/S	247	63.3					
Total	390	100.0					
		Mode of delive	ery		Chi-	df	Р
	Vaginal	delivery	Instrumental	C/S	value		value
Breast feeding started	1 hour	78	2	41	86.140	6	.000
at	12 hrs	43	7	181			

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	24 hrs	5	3	22			
	48 hrs	5	0	3			
Prelacteal feeding given	Yes	30	4	84	5.060	2	.080
	No	101	8	163			
Colostrum given	Yes	126	12	241	.961	2	.619
	No	5	0	6			
Exclusive breast feeding given	Yes	104	10	162	8.828	2	.012
	No	27	2	85			

Table shows that 63.3% of the babies were delivered by C/S, 33.6% by vaginal delivery and only 3.1% by Forcep delivery. We also observed that significantly more number of mothers who had vaginal gave breast feeding in  $1^{st}$  hour (p<0.05). Exclusive breastfeeding was given by significantly more number of mothers who had vaginal delivery (p<0.05). However the mode of delivery did not affect significantly in giving prelacteal feeding and colostrum (p>0.05)

Prolonged labour	Frequency	Percent				
Yes	115	29.5				
No	275	70.5				
Total	390	100.0				
		Prolonged labour		Chi-square	df	P value
		yes	No	value		
Breast feeding started at	1 hour	24	97	10.528	3	.015
	12 hrs.	80	151			
	24 hrs	7	23			
	48 hrs.	4	4			
Prelacteal feeding given	Yes	32	86	.456	1	.499
	No	02	190			
	NO	05	169			
Colostrum given	Yes	108	271	6.349	1	.018
	No	7	4			
Exclusive breast feeding given	Yes	84	192	.408	1	.523
	No	31	83			

Table shows that 70.5% of mothers had not prolonged labour and only 29.5% had prolonged labour. Colostrum given has an association with prolonged labour

Table 8:	Distribution of new	born by sex and association	with selected conditions (n=379)
of new born	Frequency	Percent	

Sex of new born	Frequency	Percent			
Male	194	49.7			
Female	196	50.3			
Total	390	100.0			
		Sex of new born	Chi-square	df	Р

		Male		Female	value		value
Breast feeding started at	1 hour		61	60	5.737	3	.125
	12 hrs		114	117			
	24 hrs		12	18			
	48 hrs		7	1			
Prelacteal feeding given	Yes		54	64	1.073	1	.300
	No		140	132			
Colostrum given	Yes		185	194	4.658	1	.031
	No		9	2			
Exclusive breast feeding given	Yes		141	135	.682	1	.409
	No		53	61			

Table shows that 50.3% of the newborn were female gender and 49.7% were male gender. We observe that differences of age of the newborn when breast feeding was first started among the groups according to occupation of mother were not statistically significant (p>0.05). The differences of whether prelacteal feeding and exclusive breast feeding were given among the groups were not also significant (p>0.05). However, giving colostrum was significantly (p<0.05) associated with gender of the newborn

Birth weight of new born (in Kg)	Frequency	Percent					
<2	14	3.6					
2-3	308	79.0					
>3	68	17.4					
Total	390	100.0					
		Birth weigh	t		Chi-square	df	P value
		<2 kg	2-3 kg	>3kg	value		
Breast feeding started	1 hour	3	99	19	19.680	6	.003
at	12 hrs	8	185	38			
	24 hrs	1	22	7			
	48 hrs	2	2	4			
Prelacteal feeding given	Yes	4	84	30	7.510	2	.023
	No	10	224	38			
Colostrum given	Yes	11	302	66	18.545	2	.000
	No	3	6	2			
Exclusive breast feeding given	Yes	12	224	40	6.773	2	.034
	No	2	84	28			

**Table 9:** Distribution of birth weights (baby) and association with selected conditions (n=379)

Table shows that 79% of newborn had the birth weight in the range of 2-3 Kg, 3.6% had <2 Kg and 17.4% had > 3 Kg birth weight. We observed that more of the low birth weight babies were given earlier 9within 12 hours) breastfeeding, colostrum and exclusive breastfeeding significantly (p<0.05), whereas prelacteal feeding were given less in low birth weight babies(p<0.05).

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## V. Discussion

The aim of the present study was to observe the practice of initiation of breast feeding just after birth among infants in hospital setting. It was also intended to determine the percentage of mother who start breast feeding within one hour of birth, the prevalence of prelacteal feeding and identify the sociodemographic profile of mother.

Among the 390 participants of our study 121 (31%) started breastfeeding in the first hour of delivery, 231 (59.2%) started breast feeding within 12 hours, 30 (7.7%) within 24 hours and 8 (2.1%) within 48 hours. More than two-third (69.7%) of the participants did not give prelacteal feeding to her baby and only (30.3%) gave it. More than two-thirds of the newborn (70.8%) was given exclusive breast feeding and 29.2% were not given. Almost all of the newborns (97.2%) were given colostrum and only a few were not (2.8%). This observation was supported by Haider et al. <sup>14</sup> They found that a total of 25% of the mothers failed to breast-feed exclusively despite having been counseled. The author explained the causes of their failure in breastfeeding, such as dominating grandmothers, lack of financial support by their husbands, too much housework, or disinterest.<sup>6</sup> The findings of our study are not supported by the statement of our studies. <sup>2, 6, 8</sup>

Talukder stated that colostrum, by tradition, is largely discarded in Bangladesh; prelacteal feeds are given to all newborn babies; initiation of breastfeeding by most mother takes place on the 3<sup>rd</sup> or 4<sup>th</sup> day; exclusive breastfeeding for 5 months is almost non-existent.<sup>6</sup> The difference between the findings of Talukder and our findings may be due to the fact that we took data regarding exclusive breastfeeding for only the days mothers remained admitted into the hospital, whereas Talukder stated the situation of whole Another study described that only 11.7% of children suffering from ARI breastfeeding period. and diarrhoea were exclusively breastfed, 50.3% were never exclusively breastfed. They also stated that the prevalence of prelacteal feeding in Bangladesh was 66.6%.<sup>19</sup> Giasuddin and Kabir noted that the duration of exclusive breast-feeding in Bangladesh is short. They included 5068 mother-child pairs in their study and demonstrated that median duration of full breast-feeding was 3.67 months and 69.9 per cent women gave supplementary food to their babies before reaching six months of age. They concluded that women with higher education, high economic level, lower birth interval and delivery assisted by health personnel had lower duration of breast-feeding.<sup>2</sup> Female children were breastfed for periods about 5 months shorter than male children. Children born to urban mothers were breastfed for shorter durations than children born to rural mothers of all age groups.<sup>16</sup> The difference in finding of these two observations explains the positive change in attitude of mothers towards exclusive breastfeeding to their newborns. In Bangladesh the most prevalent form of prelacteal feeding is misry water (33.9%) and closely followed by artificial milk (30.5%). Other forms of prelacteal feedings are honey (18.6%), plain water (12.7%), and cow's milk (4.2%). In most instances poor quality liquids are given to a newborn that increase the risk of introducing early infections. Prelacteal feeding differs from country to country. In India the prelacteal feedings are plain water (48.3%), jaggery with ghee/oil (46.2%), sugar water (28.2%), gripe water (24.1%), jaggery water (20.7%), omum (ajwain) water (6.8%), milk (5.4%), honey (2%), tea (.7%), omum (ajwain) with ghee/oil (.3%). Pre-lacteal feeds are given under the belief that they act as laxatives, cleansing agents or dehydrating agents or as a means of clearing meconium. Unfortunately they are not aware that pre-lacteals could be a source of contamination too.<sup>12</sup> Multiparous mothers were somewhat more (56.2%) than primi mothers (43.8%) among the participants. The present study also shows that birth weight of newborn significantly affects the exclusive breastfeeding. This finding is consistent with Narayan Nataraj and Bawa. They found in India that primigravida status mother and low birth weight infants adversely affect breastfeeding.<sup>8</sup>

Although the age of the mother did not affect significantly, mothers' education level was significantly related with breastfeeding in the present study. Our finding is supported by Ahamed (1986) who described that 98% of Bangladesh mothers breastfeed their children from birth and the mean duration of breastfeeding was 27.3 months. Duration of breastfeeding was positively related with the age of women. The duration of breastfeeding decreased with the increase of education of the mother. The author suspected that further decline in the duration of breastfeeding would increase levels of fertility and infant and child mortality.<sup>16</sup> Edmond et al also supported that early initiation of breastfeeding saves more neonatal lives.<sup>11</sup>

### **VI.** Conclusion

The study concludes that 31% mothers started breastfeeding their babies within 1 hour of deliveries, 59.2% started within 1-12 hours of birth, 7.7% within 12-24 hours and 2.1% within 24-48 hours. Colostrum was given by 97.2%, prelacteal feeding by 30.3% and exclusive breastfeeding by 70.8% of mothers. Significantly higher number of mother with no education gave breastfeeding within 1 hour. Mothers with vaginal delivery and without prolonged labour gave breastfeeding earlier and continued exclusive breastfeeding. More babies with low birth weight were given colostrum and breastfeeding earlier and exclusively.

#### Limitation of the study

The study was unicentric conducted in a tertiary care hospital which does not represent the whole country. The center was provided with neonatologists and trained nurses who take care of mother and help breastfeeding in the center. Postnatal complications in newborn and mother which may affect breastfeeding are less prevalent in tertiary care hospital.

#### VII. Recommendation

A multicentric study should be carried out to generalize the finding .Mothers of the rural areas should be included in the study.

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