

# Practice of Colostrum Feeding among Post Natal Mothers in Rural Community of District Pulwama, Kashmir

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**Abstract:** ***Background:** Colostrum is the first fluid available for the baby after birth. Its small doses are designed for the human infant. These early feeds are easily digestible. There are qualities of colostrum that make it truly unique. It is too valuable to lose; to ignore it is to promote mortality, suffering, personal, national and economic stress. The main aim of this study was to assess the practice regarding Colostrum feeding among postnatal mothers. **Methods:** A descriptive, study was conducted among 100 postnatal mothers in the selected rural community of District Pulwama. Convenient sampling was used to select a sample size of 100 postnatal mothers. Data was collected using a observational checklist. **Results:** Regarding prelacteal feed given by subjects, 21% gave honey, kahwa 13%, sugar water 32%, 40% gave any other like glucose water. On first day, top feed was given by subjects among whom 60% gave formula milk, 14% gave cow's milk. Cleaning of hands and breast before feeding was done by 62% of mothers on first day. Comfortable position taken by mother while feeding was taken by only 3% of subjects. Comfortable position to baby while feeding was not given by any subject. Regular and frequent Colostrum feeding (on demand/2 hourly) was given by 25% mothers. Burping was done immediately after Colostrum feeding by 63% mothers, feeding of diluted Colostrum was practiced by 2% of the subject. Many women were aware about the practices of colostrums feeding but the data still indicate that further efforts are required to improve it. **Conclusion:** Huge gaps continue to exist in colostrum feeding practices among mothers so the counseling methods should be used to reinforce specific, priority messages by health facility staff and community based workers.*

**Keywords:** Colostrum, Post natal mothers, Practice

## 1. Introduction

A healthy start in life is the most precious gift one can give to a new born baby. When it comes to nutrition, the best first food for the baby is the first mother's milk that is colostrum.

Colostrum has sufficient nutrients to satisfy the infant until milk is established. It is saturated with fat-soluble vitamins and minerals. It is often a yellow or orange color, reflecting the high levels of beta-carotene, one of the many antioxidants present. Antioxidants act as cell protectors in the infant's body and enhance the immune system.<sup>1</sup> The immunoglobulin's especially IgA present in Colostrum "paint" the lining of the infant's stomach and intestines and thus make these surfaces able to defend the baby against viruses and bacteria by not allowing pathogens to adhere to them.

Some of these incredible immunoglobulin's actually attack pathogens and kill them. These components are important in fighting and preventing Necrotizing Enterocolitis (NEC) in premature infants, which can be fatal. Thus, Colostrum is responsible for the first transmission of immune signals in a newborn, which are valuable in shaping the knowledge of the newborn's defense system.<sup>2</sup>

Colostrum's small doses are designed for the human infant. These early feeds are easily digestible. Stomach capacity of one day old baby is about 5-7 ml, or about the size of a marble. Interestingly, researchers have found that the day-old newborn's stomach does not stretch to hold more. Since the walls of the newborn's stomach stays firm, extra milk is most often expelled. By day three of the birth, the newborn's

stomach capacity has grown to about 0.75-1 oz, or about the size of a "shooter" marble. Small, frequent feedings assure that the baby takes in all the milk she/ he needs. Around day seven, the newborn's stomach capacity is now about 1.5-2 oz, or about the size of a ping-pong ball. Continued frequent feeding will assure that the baby takes in all the milk needed, and mother's milk production meets the demand.<sup>3</sup>

There are many other qualities of Colostrum that make it truly unique. Colostrum contains high amounts of sodium, potassium, chloride and cholesterol. This combination is believed to encourage optimal development of the infant's heart, brain, and central nervous system. This may account for the prolonged secretion of Colostrum in mothers who deliver their babies prematurely because all these components offer premature babies the best chance for the optimal development of their fragile organs.<sup>4</sup>

Colostrum is a natural source that is too valuable to lose; to ignore it is to promote mortality, suffering, personal, national and economic stress. The scientific literature reviewed recently for policy makers show that initiation of breastfeeding within one hour after birth can save more infants lives and prevent more morbidity than any other intervention strategy. Currently early breast feeding initiation saves six million infants lives each year by preventing diarrhea and acute respiratory infections. This alone is responsible for one third of the observed fertility suppression and can provide high quality nutrition at a fraction of the cost of artificial feeding or prelacteal<sup>5</sup>

The review of literature clearly depicts that in Jammu and Kashmir region due to introduction of top milk shows feeding practices have made deep inroads into the psyche of

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the population.

Every year millions of neonates die because of mothers' ignorance about the practice of breast feeding soon after birth. They are not aware of the nutrient value of colostrums and how it will help the neonate in future. So it is essential to assess the knowledge and practice of postnatal mothers regarding Colostrum feeding and improve it by providing correct education. This will help to save the lives of neonates, because, children are the citizens of tomorrow to keep our country on top of the world.

From observation in the clinical and during family visit the investigator found that postnatal mothers do not initiate Colostrum feeding soon after the delivery and the neonates are often admitted to neonatal intensive care unit due to various problems like lethargy and jaundice. So, the researcher is interested to assess the knowledge and practice of postnatal mothers regarding Colostrum feeding.

## 2. Methods

A descriptive survey design was used. The population of the study included 100 postnatal mothers from the three rural villages of district Pulwama that included Khalsa Parigam, Wanpora and Poshwan. Convenient sampling technique was used to select the sample and the subjects were approached individually with the help of ASHA worker of the respective areas. An Observational checklist was selected as tool to assess the practice of mothers regarding colostrums feeding.

## 3. Statistical Analysis

The statistical analysis of this study includes **Ist** part the frequency and percentage of Socio Demographic characteristics the second part includes the percentage distribution of subjects according to their practice.

## 4. Results

**Table1:** Socio Demographic characteristics

Demographic characteristics	f	%
Age in years		
18-23	34	34
24-29	21	21
30-35	55	55
Type of family		
Nuclear	57	57
Joint	32	32
Extended	12	12
Educational Status		
Illiterate	4	4
Middle	13	13
Matriculation	29	29
Graduation	40	40
Post graduation and above	14	14
Occupation		
Home maker	86	86
Self employee	4	4
Govt . employee	7	7
Pvt . employee	3	3
Monthly income		
Below 10,000	13	13
10.000 to 20,000	59	59

20,000 above	28	28
No of living children		
One	66	66
Two	18	18
Three or more	16	16

Table 1 shows that more than half of the mothers were in the age group of 30-35 followed by 18-23 i.e 34 % and only 21 % were in the age group of 24-29. Maximum of the subjects were from nuclear family i.e. 57% while 24% were from joint family and only 12% from extended family. Analysis related to educational status of mothers revealed that 29% subjects had schooling up to matriculation level, 24% up to secondary level, 40% were graduates, 14% were post graduates, 13 % had middle level education and only 4% were illiterate. Majority of the subjects were housewives i.e. 86% and very few i.e. 4% were self-employed, 3% were private employees and 7% of them were government employees. With respect to subject's monthly income 59% of respondents earn Rs10,000-20,000, 28% reported above Rs 20,000 income group, 13% reported below Rs.10,000. Analysis reveals 66% of mothers had one child, 18% had two children and only 16% of mothers had three and more children.

**Table 2:** Item wise percentage distribution of subjects according to their practice

Items	Yes	No
Prelacteal feed given		
Honey water	21	79
Kahwa	13	77
Sugar water	32	58
Anyother	34	67
Top feed given		
Cow's milk	14	76
Formula milk	60	40
Mother clean hands and breast before feeding	62	38
Mother takes comfortable position while colostrums feeding.	3	97
Comfortable position is given to baby while feeding	0	100
Colostrums feed is given to baby as per demand /2hourly.	25	75
Burp the baby immediately after colostrums feeding.	63	37
Diluting the colostrums and feeding to baby.	2	98

Regarding prelacteal feed given by subjects, 21% gave honey, Kahwa 13%, sugar water 32%, 40% gave any other like glucose water. On first day, top feed was given by subjects among whom 60% gave formula milk, 14% gave cow's milk. . Cleaning of hands and breast before feeding was done by 62% of mothers on first day. Comfortable position taken by mother while feeding was taken by only 3% of subjects. Comfortable position to baby while feeding was not given by any subject. Regular and frequent Colostrum feeding (on demand/2 hourly) was given by 25% mothers. Burping was done immediately after Colostrum feeding by 63% mothers, feeding of diluted Colostrum was practiced by 2% of the subject.

## 5. Discussion

The findings of this study depict that the postnatal mothers don't practice properly the colostrums feeding to the

newborn babies and the culture of prelacteal feed and top feeding still exists. None of the subject was able to give proper position to the baby while feeding. Consistent to this a study was conducted by Miran L on mothers' infant feeding belief & practices revealed that majority of women i.e. 65% gave colostrum, however 35% women introduced infant formula while in hospital.<sup>6</sup> A similar kind of study was being done by Lata S on colostrums feeding practices among 59 post natal mothers revealed that cow's milk as top feed was given by 4% of subjects and practice of prelacteal feeding was high as 50% of the subjects gave prelacteal feed, among whom 84% gave honey and 16% gave Ghutti<sup>7</sup>.

## 6. Conclusion

The findings of this study showed gaps in practice of colostrums feeding among the postnatal mothers. Community based programs in order to initiate colostrums feeding immediately after delivery and not to accept any traditional myths about colostrums feeding. Furthermore, it is recommended to conduct qualitative research to explore the reasons and beliefs associated with poor practices of colostrums feeding.

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## Authors Profile

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