

# IMPORTANCE OF COLOSTRUM IN INFANTS

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**Abstract:** Mother's breast feeding i.e. (nursing) is the milk feeding to the infants and young children rich in colostrum which is essential component of breast milk, colostrum rich in all the nutrients vitamins, immunoglobulins, required for healthy growth. United Nations Integrated Children Emergency guide lines suggested that breast milk alone is the ideal nourishment for infants essentially needed for the first six month of development. The present study designed to investigate the impact of breast milk on infants of age between 0 to 12 months. This study is an effort to describe colostrum feeding practices and effect on infants. Further more to find out the reason responsible for poor growth of normal infants. 200 beneficiaries of different families were selected. Under the study mothers were interviewed in the selected areas of the Allahabad City through questionnaire method. The findings of the present study demonstrated that 91% mother were aware of the importance of breast feeding rich in colostrum the first natural vaccine to the infants.

**Key words-** Colostrum, infants, breast feeding, immunity.

**Introduction-** Breast milk colostrum also known as first milk "liquid gold" or "immune milk" is a clear sticky, thick liquid produced in mother's mammary gland just after the delivery i.e. baby birth (1). The first milk rich in colostrum is particularly rich in immunoglobulin(IgG) provides passive immunity to the neonate (2). It is a milky substance that is produced by the breast of mammals before birth and during the first few days following birth. Colostrum contains many nutritional benefits for the babies, including proteins, carbohydrates, fats, vitamins, minerals and antibodies, which are important disease fighting proteins produced by the immune system that attack and kill microorganisms such as bacteria, fungi, parasites and viruses. The antibody label in colostrum can be as high as hundred times the label found in regular milk(3). It is considered babies first immunization because it contains large quantities of an antibody called secretory immunoglobulin. As breast milk changes from colostrum to mature milk, the concentration of immune factors and antibodies decreases, but the volume of breast milk greatly increases(4). On first day of infants abdomen capacity is around 5 to 7 ml this is why just a few tsp of colostrum is needed to satisfy a baby's appetite. On day 7 baby's tummy is about size of ping pong ball, by then mother milk supply will be meeting infants demands with mature milk. So new mothers have not to worry about a low quantity of the milk supply during the first few weeks. Breast feed the baby as often as mother can, so mother milk supply increases sufficiently(5). WHO recommends mother's first milk of the "very fast food" as the perfect food for every new born. Under awareness celebrate world breast feeding week (01 to 7 August) by ensuring that every new born receives colostrum, the very fast food(6). A study conducted by Danida in seven districts of Madhya Pradesh reported only 51.5% as stating that colostrum was important and the reasons for not feeding the baby with colostrum were dirty(25.9%), harmful (23.0%), baby will become sick(13%), cause pain in abdomen (3.4%), too thick(2%) and stagnant(1.4%). New born have immature digestive system which suits the low volume concentrated form of nutrient supply system of . The laxative effect of colostrum encourages passage of baby's first stool, meconium. This helps to clear excess bilirubin which is produced in large quantities at birth and helps prevent jaundice(7). The survey on Children Ministry of women and Child development 2015 shows that only 45% infants are now being breast fed within an hour of birth in India and just 65% are being exclusively breast fed as per WHO recommendation(8). In Uttar Pradesh breast feeding practices which are not up to the mark only 39.4% of new born receive breast milk within one hour and about 20.8% infants sustain mother milk till 35 weeks(Annual health survey 2012-13(9).

**Material and method-** The present study was conducted on mothers to provide awareness of feeding practices and importance of colostrum which improves health and development of neonates was the main objective of the present study. Infants colostrum feeding is established as a social norm in all communities so the study was conducted on 200 mothers of infants aged 0 to 12 months in Prayagraj City. The selected mother aged between 20 to 40 years with infants aged 0 to one years. Subject were explained orally about the study. Data collection and educational counseling was done by single observer. Pre-tested questionnaire was used, which includes warier demographic and socioeconomic factors like age, regarding initiation and duration of breast feeding, exclusive breast feeding, prelactal feeding etc.

**Results-** The sample size of 200 mothers participated among them 30% mothers aged 30- 35 years, 21% mother between 25-30 years, 23% mother aged 30-40 years. It was noticed that the maximum awareness in the age group of 30-35 years in the present survey 97% mothers were aware the importance of breast feed and only 3% mothers were not able to breast feed due to health and professional reason, 91% mothers are aware about colostrum so they baby fed her and 9% are not fed because its behind some reason due to custom or its bad or dirty yellow milk so they are not feed.

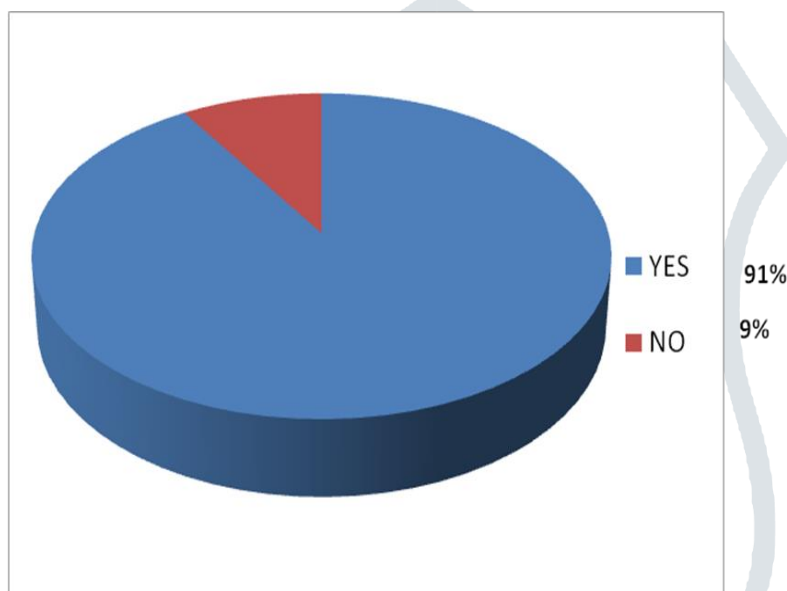


Figure 1: Mothers given colostrum or not

The distribution of infants according to causes of colostrum given or not maximum 64.5% mothers given colostrum because according to her colostrum is good for baby and 26.5% mothers says that the colostrum is good for health her baby.

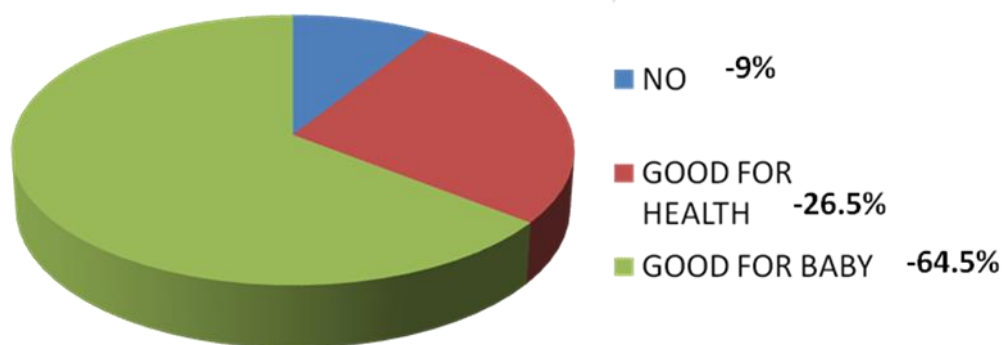


Figure 2: Benefit of colostrum

Distribution of infants according to why not given colostrum 4% mothers says it is bad for baby 2.5% mothers says colostrum thick yellow milk so it is not easily digestible and 2.5% mothers says baby could not suck.

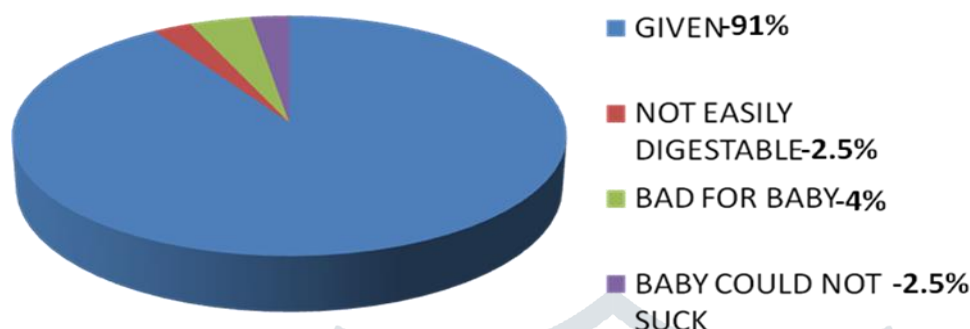


Figure 3: Why not given colostrum

Distribution of infants according to who advice to discard colostrum 5% doctors are advice not given colostrum and 4% mother in-law.

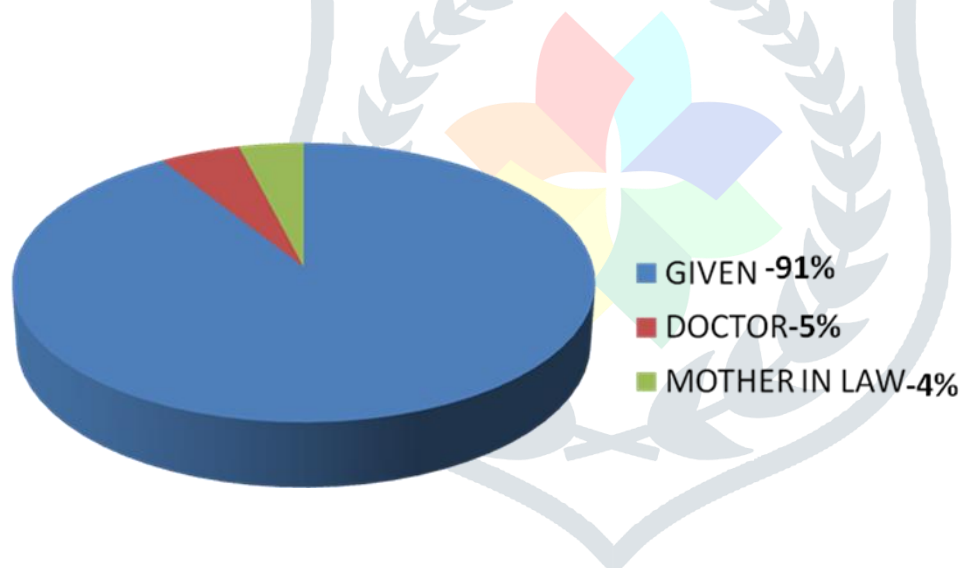


Figure 4: Who advice to discard colostrum

**Discussion-** There are many other qualities of colostrum that make it truly unique. Unfortunately colostrum feeding is not given to new born for various social myths and misconception in a false believe of gutty honey, sugar water, glucose, mishri water were feed as pre-lacteal feeds. These man made problems affect directly and indirectly health of new born infants and cause malnutrition and high mortality rate in infants. A new born's immunion system is far from being fully developed hence, they are valunerable to illness and require protection from external sources this is were colostrum (and later breast milk) is important, no wonder colostrum is often referred to as natures vaccine for new born infants. In the present study mostly mothers are aware about the feeding of colostrum, 91% mothers feed the first yellow milk of colostrum because the reason of behind it Allahabad City is a educational hub so the maximum mothers are educated(42.5% are education of college label) so they well known about

the advantage of colostrum, 64.5% mothers think that the colostrum is good for baby and according to 26.5% mothers its good for health. By WHO that all new born babies be exclusively breast fed for 6 months. Feeding colostrum in the first hour is the first step. It is imperative that every child receives colostrum to get ahead in the race against malnutrition. In the present survey 4% mothers not fed colostrum behind the reason of some custom of their religion so their thinking that the yellow milk is dirty milk so bad for baby and 2.5% mothers think that the colostrum is not easily digestible. As per the National family health survey-4(2015-16) the percentage of new born getting first milk(colostrum) within the first hour of their birth is even lower around 20%. In the pervious study of Allahabad in Block Jasra (2014-15), 57.69% of infants were exclusively breast feed starting 6 months and prelacteals was given 41.3% and colostrums fed 66.67%.

**Conclusion-** World Health Organization nutrition urges every one to inform them selves, spread the knowledge and support mothers to feed their babies colostrum. These simple actions will go along way in helping to ensure that every new born receives the very best start in life- the very first food first, in the first hour of life. Previous researches have shown that when colostrum is removed with the first hour after birth the more milk a mother will produce. In our society many mothers and their relatives are well known about the importance of the colostrum for infants and their mothers because it is liquid gold of their infants and its mothers for their better life. The aim of the preset study is the best interest of infants and their mothers to ensure the best possible start their life as the foundation for full filament of the every baby right to survival, growth and development, protection and participation without any hindrance.

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