

The Attitude and Knowledge of Mothers Regarding Use of Colostrum in Newborn Feeding

Usman Ali Faisal, Alia Rubab and Shahzadi Asma Tahseen

ABSTRACT

Objective: To assess awareness about the knowledge, attitude and behaviour of mothers about the use of colostrum for the newborn feeding.

Study Design: Observational / descriptive /cross-sectional study

Place and Duration of Study: This study was conducted at Pediatric Outpatient Department, Civil Hospital Bahawalpur from July 10, 2015 to August 8, 2015.

Materials and Methods: This study was conducted on mothers who attended Pediatric Outpatient Department, Civil Hospital Bahawalpur for the medical checkup of their children less than one year of age. The mothers were interviewed by the one of the researchers using a structured questionnaire about colostrum including the demographic data.

Results: There were 100 mothers included in this study. There were 4% mothers younger than 20 years, 63% in the age group 21-30 years, 20% age group 31-40 years while 3% were older than 40 years. 17% mothers were having at least matriculation, 59% were having education less than that while 34% were uneducated. 94% mothers were house wives. There were 79% mothers who had heard about colostrum; among which 51% heard from either family members or from friends, 21% from medical personnels, 7% from media while 21% never heard of it. There were only 25% mothers who believed that colostrum was the best first feed of newborn, while 61% mothers believed it is GHUTTI that was best. There were 22% mothers who believed that it was beneficial for the health, 13% were in the opinion that it is injurious for the health while 65% replied 'do not know'. There were 41% mothers who told colostrum as yellow and thick, 11% replied it was milk like. There were 32% mothers who believed that colostrum is sufficient for initial newborn feeding, 25% believed it is insufficient. There were only 19% mothers who believed that baby must be put on breast for feeding within half an hour.

Conclusion: The awareness of mothers about the use colostrum is poor to moderate.

Key Words: Colostrum, Newborn feeding, Awareness, Mothers.

Citation of article: Faisal UA, Rubab A, Tahseen SA. The Attitude and Knowledge of Mothers Regarding Use of Colostrum in Newborn Feeding. Med Forum 2016;27(10):19-21.

INTRODUCTION

The colostrum is milk secreted for a few days after childbirth. Colostrum, produced in low quantities in the first few days after delivery, is rich in immunologic factors such as secretory IgA, lactoferrin, leukocytes, as well as growth factors like epidermal growth factor. Colostrum also contains relatively low concentrations of lactose, indicating its primary functions to be immunologic and trophic rather than nutritional. The sodium, chloride and magnesium contents are higher and levels of potassium and calcium are lower in colostrum than in later milk. So it is an important source of protective, nutritional and growth factors for the newborn^{1,2}.

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 to prevent jaundice. It, ordinarily, has a distinct yellow color due to carotenoids of its fat globules³.

If prelacteals are given as first feed instead of colostrum there are chances of insufficient mother milk yield for rest of the lactation period. The various studies done in Pakistan showed that 34.6% -72% (4,5,6,7) babies were given colostrum as first feed. The studies (8,9) done abroad also showed variable results.

Keeping in mind above facts about colostrum, it was planned to conduct this study. The objective of this study was to assess awareness about the knowledge, attitude and behaviour of mothers about the use of colostrum for the newborn feeding. This study will help us in future planning about the promotion of use of colostrum as initial newborn feeding in the community.

MATERIALS AND METHODS

This cross-sectional study was conducted on mothers who attended Pediatric Outpatient Department, Civil

Department of Pediatrics, The Civil Hospital, Bahawalpur.

Correspondence: Dr. Shahzadi Asma Tahseen, Senior Registrar, Dept. of Pediatrics, Civil Hospital, Bahawalpur.
Contact No: 0300-6848195
Email: asmatahseen013@gmail.com

Received: July 24, 2016;

Accepted: August 29, 2016

Hospital Bahawalpur for the medical checkup of their children less than one year of age from July 10, 2015 to August 8, 2015. After explaining the study purpose and details, thereof, those who agreed to participate in the study were interviewed by the one of the researchers using a structured questionnaire about colostrum including the demographic data. The interview was conducted in English, Urdu or in local languages according to the understanding of mother. The Performa was filled by the same researcher who conducted interview. The mothers who refused for the interview, or whose child was serious enough needing urgent admission or carrying child one year or older were excluded from the study.

The data collected were entered and analyzed by using SPSS version 10. Data were expressed as percentages or proportions.

RESULTS

There were 100 mothers included in this study. There were 14(14%) mothers younger than 20 years, 63 (63%) in the age group 21-30 years, 20 (20%) in the age group 31-40 years while 3 (3%) were older than 40 years. Among the studied mothers 17 (17%) were at least matriculate, 59 (59%) were having education less than matriculation while 34 (34%) did not go to school in their lives. The 94 (94%) mothers were house wives, 3 (3%) teachers, 2(2%) housemaid and 1 (1%) was lady health worker.

There were 79 (79%) mothers who heard about colostrum among which 51 (51%) heard from either family members or from friends, 21 (21%) from medical personnels, 7 (7%) from media while 21(21%) never heard of it.

There were only 25 (25%) mothers who believed that colostrum was the best first feed of newborn, while 61(61%) mothers believed it was GHUTTI that was best while 14 (14%) mothers gave no opinion.

There were 22 (22%) mothers who believed that it was beneficial for the health, 13 (13%) were in the opinion that it was injurious for the health while 65(65%) replied 'do not know'.

There were 41(41%) mothers who replied to the question 'what is the character of colostrum?' as thick yellow, 11(11%) replied it was milk like while rest 49(49%) answered 'do not know'.

There were 32(32%) mothers who believed that colostrum was sufficient for initial newborn feeding, 25 (25%) believed it was insufficient while 43 (43%) replied 'do not know'.

There were only 19(19%) mothers who believed that baby must be put on breast for feeding within half an hour.

DISCUSSION

The colostrum is the best first feed of the baby. This study was conducted to assess the awareness regarding

colostrum among mothers. There were 4% mothers younger than 20 years, 63% in the age group 21-30 years, 20% in the age group 31-40 years while 3% were older than 40 years. The mean age of mothers was 26.7% in the study by Aisha et al¹⁰.

Among the studied mothers 17% were having, at least, matriculation, 59% were having education less than that while 34% did not go to school in their lives. There were 57%-63% uneducated mothers in the other studies^{7,10} conducted in Pakistan. The study done in Nepal by Joshi et al¹¹ showed that 66% mothers were matriculate.

The 94% mothers were house wives, 3% teachers, 2% housemaid and 1% was lady health worker in this study. Aisha et al¹⁰ showed that 77% were housewives. The study done by Joshi et al¹¹ showed 27% women were employed.

There were 79% mothers who heard about colostrum among which 51% heard from either family members or from friends, 21% from medical personnels, 7% from media while 21% never heard of it. Aisha et al¹⁰ showed 90% women heard about colostrum among which 15% received information through media, 30% got to know about it from family and friends, 35% from health personnels while 10% from other sources. Khan et al¹² showed that 57% mothers were unaware of its use in newborn feeding. Baloch et al 2009⁷ showed that main source of information was family members and health personnels. The study done by Joshi et al¹¹ showed that 74 % women knew about colostrum through media, followed by family and friends and via doctors and health workers.

There were only 25% mothers who believed that colostrum is the first feed of newborn, while 61% mothers believed it was GHUTTI that was best while 14% mothers gave no opinion.

There were 22% mothers who believed that it was beneficial for the health, 13% were in the opinion that it is injurious for the health while 65% replied 'do not know'. Aisha et al¹⁰ showed that 35% women perceived it as harmful while only 15% women took it as beneficial.

The study by Baloch et al⁷ showed that 12% mothers were aware of the fact that it is beneficial while 11% considered it unhealthy. Khan et al¹² showed that 43% mothers took it unhealthy. The study done by Joshi et al¹¹ showed that 69% of the women were aware that colostrum was nutritious.

There were 41% mothers who described colostrum as yellow and thick, 11% described it was milk like while rest 49% answered 'do not know'.

There were 19% mothers who believed that baby must be put on breast for feeding within half an hour. Aisha et al¹⁰ showed that only 14% percent while Asim et al¹³ showed that 28% mothers said the baby must immediately be put on breast. The study¹⁴ done among medical students showed that 69% students knew that

breastfeeding should be initiated immediately after birth.

In brief, the awareness about colostrum is poor to moderate and needs to be improved.

CONCLUSION

The awareness about colostrum is poor to moderate

Conflict of Interest: The study has no conflict of interest to declare by any author.

REFERENCES

1. Ballard O, Morrow AL. Human milk composition: nutrients and bioactive factors. *Pediatr Clin North Am* 2013;60(1):49-74.
2. Palmer DJ, Kelly VC, Smit AM, Kuy S, Knight CG, Cooper GJ. Human colostrum: identification of minor proteins in the aqueous phase by proteomics. *Proteomics* 2006;6(7):2208-16.
3. Patton S, Canfield LM, Huston GE, Ferris AM, Jensen RG. Carotenoids of human colostrum. *Lipids* 1990;25(3):159-65.
4. Kulsoom U, Saeed A. Breast feeding practices and beliefs about weaning among mothers of infants aged 0-12 months. *J Pak Med Assoc* 1997; 47(2):54-60.
5. Iqbal SMJ, Afzal MF, Azhar IA, Sultan MA. First feed in newborn: are we following WHO recommendations? *Ann King Edward Med Uni* 2010;16(4):229-32.
6. Memon Y, Sheikh S, Memon A, Memon N. Feeding beliefs and practices of mothers/caregivers for their infants. *JLUMHS* 2006;5(1): 8-13.
7. Baloch AA, Bhutto A, Sohrab S, Mumtaz Z, Aftab A, Akabar Z. Awareness regarding breastfeeding in females of lower socioeconomic group in Karachi. *Med Channel* 2009;15(4): 19-22.
8. Srivastava SP, Sharma VK, Kumar V. Breast feeding pattern in neonates. *Ind Pediatr* 1994; 31(9):1079-82.
9. Legesse M, Demena M, Mesfin F, Haile D. Factors Associated with Colostrum Avoidance Among Mothers of Children Aged less than 24 Months in Raya Kobo district, North-eastern Ethiopia: Community-based Cross-sectional Study. *J Trop Pediatr* 2015;61(5):357-63.
10. Aisha R, Batool F, Sultana S. Knowledge, Attitude and Practices about Colostrum Feeding among Pregnant Women in Military Hospital Rawalpindi of Pakistan. *OJN* 2016;6(04):309.
11. Joshi SK, Barakoti B, Lamsal S. Colostrum feeding: knowledge, attitude and practice in pregnant women in a teaching hospital in Nepal. *Med Edu* 2012;3(8):1-20.
12. Khan S, Iqbal I, Arshad R, Ishfaq K. Breast feeding; awareness and complementary feeding in mothers of children with severe acute malnutrition at nutrition stabilization centre children hospital and institute of child health multan. *Professional Med J* 2015;22(12):1531-4.
13. Asim M, Malik N, Tabassum A, Haider M, Anwar HN. Perception and Practices of Mothers about Feeding Practices of Newborn Babies in Faisalabad, Pakistan. *MJSS* 2014; 5 (4) : 662-68
14. Anjum Q, Ashfaq T, Siddiqui H. Knowledge regarding breastfeeding practices among medical students of Ziauddin University Karachi. *J Pak Med Assoc* 2007;57(10):480-3.