KNOWLEDGE AND PRACTICES REGARDING COLOSTRUM FEEDING AMONG PREGNANT MOTHERS IN RAHIM YAR KHAN

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ABSTRACT

Background: Colostrum is important for promoting health, growth and development of newborn and fighting the infections. **Objective:** To assess the knowledge and practices about Colostrum feeding among pregnant mothers in Rahim Yar Khan. **Methodology:** Study Design: Cross Sectional study. Duration and Setting: This Study was conducted from 8th March to 22th August 2017, in Sheikh Zayed Medical College/Hospital, Rahim Yar Khan. A sample of 105 mothers was taken from Pediatrics department, Gynecology department and EPI center of Hospital that were selected by convenient sampling. A pre-designed questionnaire having variables like age of mothers, Education of mother, Occupation of mother, Residence area of mothers, knowledge about colostrum feeding, Source of information, Knowledge about importance of colostrum, Knowledge about prelacteal feeding, Practices about colostrum feeding, Practices about prelacteal feeding was filled by interviewing these women. Data was analyzed by using SPSS 16. **Results:** In our study, mean age of mothers was 27.85 ± 5 years, 42.9% study subjects were illitetrate 77.1% were house wives. 76.2% women has information about colostrum 45.7% of study subjects mentioned that the source of information was friends and family. 42.9% of mothers acknowledged colostrum as nutritious milk. 69.5% study subjects had misconception that prelacteal feeds are necessary for child health. 28.6% women has started breast feeding within 1st hour and 73.3% has given prelacteal feeds to their newborn babies. **Conclusion:** Majority of mothers had good knowledge about colostrum feeding and they thought that it was nutritious milk and good for newborn health. But on the other hand, three fourth mothers practiced prelacteal feeding for their kids. There is a big gap between knowledge and practice about colostrum feeding. Health education programme should be started to cover this gap.

Key Words: Knowledge, Practices, Colostrum, Feeding.

INTRODUCTION

The first milk secreted at the time of parturition, differing from the milk secreted later, by containing more lactalbumin and lactoprotein, and also being rich in antibodies that confer passive immunity to the newborn, also called "foremilk".[1] Colostrum is known to contain immune cells as lymphocytes.[2] It helps to reduce one of the leading causes of death in our country like diarrhea and Acute Respiratory Infection.[3] Although there is little milk at that time it helps to establish feeding and a close mother-child relationship, known as "bonding".[4] Early initiation of breast feeding also reduces a mother's risk of postpartum hemorrhage, one of the leading causes of maternal mortality.[5]

Unfortunately colostrum feeding is not given to new born for various societal myths and misconception. In a false belief of ghutty, honey, sugar water, glucose, and mishri water were fed as pre-lacteal feeds in our country.[6] Infant mortality rate (74 deaths/1000 live births) means 1 in every 14 infants in Pakistan die before reaching one year of age, that indicate one child dies every minute from communicable diseases.[7] It is suggested that to reduce infant mortality and ill health, the mother should first provide breast milk to her infant within one hour of birth referred to as "early initiation of breast feeding".[8] Timely initiation of breastfeeding, is not only the easiest, but also the most cost effective and most successful intervention in improving the health of the newborn.[9] Health status of the infants in entire South East Asia is alarming, and the entire picture of South East Asia in terms of neonatal deaths is critical, Pakistan being one of the countries.[10] Working on Sustainable Development Goals, Colostrum feeding has a lot of importance in reducing child mortality and morbidity.[11,12] As there was limited data or research available related to Colostrum Feeding in our rural areas, this study was done to assess the Knowledge and Practices of Colostrum Feeding among pregnant mothers of Rahim Yar Khan.

METHODOLOGY

Study Design: Cross sectional study. Study Setting: Gynecology department, Pediatrics departments and EPI center of Sheikh Zayed Medical College/ Hospital, Rahim Yar Khan. Study Subjects: Pregnant Mothers with at least one child of less than 2 years age. Sample Size: A total of 105 mothers were

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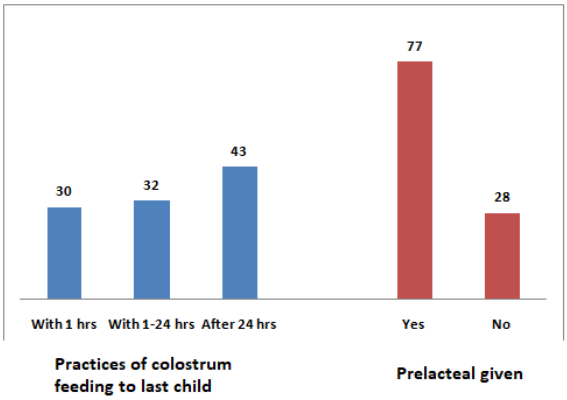
included in this study. Sampling Technique: Convenient sampling. Duration of Study: The study was conducted from 8th March to 22nd August 2017. **Inclusion Criteria:** Mothers having at least one child of less than 2 year age and pregnant. Who gave informed consent. **Exclusion Criteria:** Mothers who were pregnant for the first time. Data Collection Method: This study was conducted on sample of 105 mothers that were selected by convenient sampling. A pre-designed questionnaire having variables like age of mothers, education of mother, Occupation of mothers, residence area of mothers, Information about colostrum feeding, Knowledge about colostrum feeding, source of information, Importance of colostrum to child health, Knowledge about prelacteal feeding, Practices about colostrum feeding, Practices about prelacteal feeding was filled by interviewing these women. All the data was collected after getting verbal consent from mothers. **Data Analysis:** Data was entered and analyzed by using SPSS version 16. The frequencies and percentages were calculated on categorical variables. Means and Standard Deviation were calculated on numerical variables i.e Age and Monthly income. Ethical approval was sought from Institutional Review Board.

RESULTS

According to the results of study, mean age and mean monthly family income of pregnant mothers was 27±5 years and 14847±4000 (PKR). (Table I)

Figure I: Colostrum feeding and prelacteal given



Majority of mothers 81 (77.1%) were housewives, 45 (42.9%) were illiterate, 32 (30.55%) had four children and 57 (54.3%) belonged to urban areas, 80 (76.2%) mothers had heard about colostrum feeding 48 (45.7%) got information from family and friends, 45 (42.9%) thought that colostrum was a nutritious milk, and 77 (73.3%) did prelacteal feeding. 43(41%) did colostrum feeding after 24 hours. 18 (40%) mothers told colostrum is nutritious milk and 20 (35%) mothers belonging to urban areas did colostrum feeding within first hour after delivery. (Figure I) (Table I)

Table I: Descriptive statistics and knowledge about colostrum. (n=105)

Education Status	
Characteristics	**Frequency(%)**
Illiterate	45 (42.9)
Primary	22 (21)
Middle	13 (12.4)
Matriculation	13 (12.4)
Inter	8 (7.6)
Graduate	4 (3.8)
Total	**105 (100)**
Occupation	
House wife	81 (77.1)
Govt. servant	5 (4.8)
Private servant	5 (4.8)
Village worker	8 (7.6)
Labourer	6 (5.7)
Total	**105 (100)**
Source of information about colostrums feeding	
Media	10 (9.5)
Antenatal care Doctor	14 (13.3)
LHV	1 (1.0)
LHW	4 (3.8)
Family and Friends	48 (45.7)
Not Know	28 (26.7)
Total	**105 (100)**
Knowledge about importance of colostrums feeding	
Nutrious milk	45 (42.9)
No Idea	25 (23.8)
Thick milk	21 (20)
First milk to be discarded	8 (7.6)
Ordinary Milk	6 (5.7)
Total	**105 (100)**
Prelacteal feeding is necessary for child	
Agreed	73 (69.5)
Not agreed	17 (16.2)
No idea	15 (14.3)
Total	105 (100)

Table II: Knowledge and practices about colostrum feeding versus education of mothers and residence.

Education of mothers	Mother education versus knowledge about colostrum					
	Ordinay milk No(%)	Thick milk No(%)	Nutritious milk No(%)	First milk to be discarded No (%)	No idea No (%)	Total No (%)
Illiterate	4(9%)	5(11%)	18(40%)	4(9%)	14(31%)	45(100%)
Primary	0	6(27%)	9(41%)	2(9%)	5(23%)	22(100%)
Middle	1(7.5%)	2(15%)	8(61.5%)	1(7.5%)	1(7.5%)	13(100%)
Matric	0 (0%)	4(31%)	5(38%)	0 (0%)	4(31%)	13(100%)
Inter	(12.5%)	3(38%)	2(25%)	1(12.5%)	1(12.5%)	8(100%)
Above inter	0 (0%)	1(25%)	3(75%)	0 (0%)	0 (0%)	4(100%)
Total	**6**(5.7%)	**21**(20%)	**45**(43%)	**8**(7.6%)	**25**(24%)	**105**(100%)
ducatio	f mothers versus practices about colostrum feeding					
Education of mothers	Within 1 hr No (%)	Within 1-24 hr No (%)	After 24 hr No (%)			Total
Illiterate	5 (11%)	14 (31%)	26 (58%)			45 (100%)
Primary	4 (18%)	8 (36%)	10 (46%)			22 (100%)
Middle	3 (23%)	7 (54%)	3 (23%)			13 (100%)
Matric	8 (62%)	2 (15%)	3 (23%)			13 (100%)
Inter	6 (75%)	1 (12.5%)	1 (12.5%)			8 (100%)
Above Inter	(100%)	0 (0%)	0 (0%)			4(100%)
Total	**30**(28%)	**32**(30%)	**43**(42%)			**105**(100%)
Residence VS Practices about colostrum feeding						
Residence	Within 1hr No (%)	Within 1-24 hr No (%)	After 24 No (%)			Total
Rural	10(21%)	20(42%)	18(37%)			48(100%)
Urban	20(35%)	12(21%)	25(44%)			57(100%)
Total	30(28%)	32(30%)	43(42%)			105(100%)

DISCUSSION

In this study, we assessed knowledge and practices of mothers regarding colosturm feeding. The total sample size in this study was 105. The mean age of women was 27.85 years with standard deviation of 5.82 years, it was noted that 42.9% of the mothers were illiterate and 3.8% of them were graduate, while in another study only 2.5% were illiterate and 36.9% of them were secondary and above.[13] In our study, 54.3% subjects belonged to urban area while 45.7% to rural area. Occupation of the pregnant ladies was as follows: house wife 77.1%, village worker 7.6%, labourers 5.7%, government servant 4.8%, private servant 4.8%, which is in contrast to another study in which 95% of women were unemployed and only 5% were employed.[14]

In this study, 76.2% women had heard about colostrum feeding. In another study it was 95%.[15]

In this study, 45.7% women mentioned that the source of information was friends and family, and 13.3%, 9.5%, 3.3%, 1%, reported antenatal doctor, media, LHV, LHW respectively.

According to another study, more than half (65%) of mothers mentioned receiving breastfeeding information from sources other than the MCH nurses.[15] Although health care providers' advice is not the only expected source of information, it is interesting to note that a higher number of the respondents received breastfeeding information from other sources such as their mothers (largest proportion), grandmothers, friends and relatives rather than the physician and the media.

In this study, 42.9% mothers told that it was nutritious milk, 23.8% had no idea about colostrum, 20% thought it was thick milk, while according to 5.7% and 7.6% it as ordinary milk and first milk to be discarded respectively. In current study, 69.5% women told that prelacteal feeding is compulsory for child before colostrums feeding, 16.2 % women were not agreed with this while 14.3 % women had no idea.

In our study, 41% of women had started breast feeding after 24 hour while 28.6% and 30.5 % fed colostrum within 1st and 1 – 12 hours respectively. In this study, 73.3% had given pre lacteal feeds like "ghutti" to their newborn babies this trend was also practiced in Karachi where almost two third of mothers 73% gave pre-lacteal feeds to their neonates.[16]

Education status vs knowledge of colostrum illustrated that 40% illiterate mothers told that it was nutrious milk. This ratio increased with education status, 75% graduated mothers acknowledged it as nutrious milk. In this study, 11% illiterate mothers were feeding colostrum within 1st hour while all graduated mothers were feeding colostrum within 1st hour after delivery of newborn. In our study 21% women from rural area and 35% women from urban area were feeding colostrum within 1st hour.

CONCLUSION

Majority of mothers had good knowledge about colostrum feeding and they thought that it was nutritious milk and good for babies health. But on the other hand majority mothers practiced prelacteal feeding for their kids at the place of colostrum feeding. There is a big gap between knowledge and practice about colostrum feeding in Rahim Yar Khan. Health education programme should be started in Rahim Yar Khan to cover this gap.

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