



RESEARCH ARTICLE

TO FIND PRE LACTEAL FEEDING PRACTICES AND BELIEFS AMONG WOMEN DELIVERED IN THE DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY, OF TERTIARY CARE CENTER: A CROSS SECTIONAL STUDY

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ARTICLE INFO

Article History:

Received 24th February, 2017
Received in revised form
11th March, 2017
Accepted 17th April, 2017
Published online 23rd May, 2017

Key words:

Pre lacteal feed,
Practices, Beliefs,
Mode of delivery.

ABSTRACT

Breast milk is undoubtedly the best source of nutrients and antibodies. Despite the negative effects of pre lacteal feeds, in India practice of giving pre lacteal feed varies from 10.2% to as high as 90%.

Objective: To find various pre lacteal feeding practices and beliefs in women delivered in the Department of Obstetrics and Gynaecology, S.M.S. Medical College, Jaipur.

Material and Methods: It was a hospital based cross sectional study. 350 post partum women who gave written informed consent to participate in the study were included. A predesigned questionnaire was used to collect data regarding pre lacteal feeding practices and beliefs associated with it. Data were analyzed statistically

Results: 75.7% babies received pre lacteal feed. 79.3% of them received it within 1 to 4 hour. Cow's milk was the commonest pre lacteal feed (30.2%). Grandmother (40.4%) and grandfather (24.2%) were the most frequent provider of pre lacteal feed. The commonest belief for giving pre lacteal feed was that the child will acquire qualities of pre lacteal feed giver followed by family custom (36.6%) and insufficient milk production (28.7%) in the mother. Pre lacteal feeding differed significantly with literacy status, type of family and mode of delivery. Age of the mother and sex of the child did not affect prelacteal feeding.

Conclusion: Pre lacteal feeding practices are still very high in our society because of the family customs and tradition. Repeated counseling of the expecting mothers during ante natal clinics and immediately after giving birth is required to promote exclusive breastfeeding practices and to eradicate pre lacteal feeding behaviors.

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Citation: Dr. Devendra K Benwal, Dr. Himanshi Gangwal, Dr. Premlata Mital, Dr. Renu Jain, Dr. Suchita Agarwal, Dr. Richa Ainani and Dr. Sunita Singhal. 2017. "To find pre lacteal feeding practices and beliefs among women delivered in the department of obstetrics and gynaecology, of tertiary care center: a cross sectional study", *International Journal of Current Research*, 9, (05), 50716-50719.

INTRODUCTION

Breast milk is undoubtedly the best source of nutrients and antibodies which provides nourishment and protection from infections to the newborn and helps in forming a bond with the mother. Exclusive breastfeeding (EBF) is recommended as the optimum method of feeding for the first 6 months of life. Breast milk should be initiated within half an hour of delivery until unless medically contraindicated. Breastfeeding has been suggested as a modifiable influencing factor which can help in reducing occurrence of respiratory and gastrointestinal tract infections (Duijts, 2001). Pre-lacteal feeds are defined as any kind of foods given to newborns before breastfeeding is established or before breast milk "comes in," usually on the first day of life.

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It is an age old customary practice which is prevalent in all communities and countries all over the world irrespective of caste and geographical distribution. The commonest belief for pre-lacteal feeding is that breast milk is secreted mostly by the second or third day after birth, and hence pre-lacteal feeds are given to a newborn for fear that he/she may be hungry since birth or become dehydrated. Various substances commonly used for pre-lacteal feeds are honey, sugar-water, jaggery water, castor oil, goat's or cow's milk. Pre-lacteal liquids are harmful to a new born mainly due to two reasons. Firstly, being of poor quality, it increases the risk of introducing early infections to a new born and secondly it reduces the practice of exclusive breastfeeding. The World Health Organization (WHO) and United Nations Children's Fund (UNICEF) in 1991 launched the Baby Friendly Hospital Initiative and revised, updated and expanded for integrated care in 2009 to increase breastfeeding rates worldwide. Hospitals are expected

to implement the ten steps to successful breastfeeding. Step number 6 states that new born infants should be fed on breast milk only unless medically indicated and under no circumstances should breast milk substitutes, feeding bottles or pacifiers be given to new born infants (WHO, 2009). The Infant and Young Child Feeding Guidelines formulated by Indian academy of pediatrics (IAP) in 2010 (IYCF) recommends exclusive breast feeding up to six months of age and no prelacteal feeds to be given to newborns (Infant and Young Child Feeding Chapter, 2010). The use of pre lacteal feeding has remained high despite the international recommendation that discourage the use. 18% infants in Singapore (Koosha, 2008), and 73.3% in Vietnam (Nguyen, 2013) are reported to have pre-lacteal feeds. In India practice of giving pre lacteal feed varies from 10.2% to as high as 90% (Gupta, 2012; Raval, 2011 and Khan, 2010). Despite the negative effects of pre lacteal feeds, information on pre lacteal feeding practices is very scarce in Rajasthan. Keeping this in mind the present study was done to find various pre lacteal feeding practices and beliefs in women delivered in the Department of Obstetrics and Gynaecology, S.M.S. Medical College, Jaipur.

MATERIALS AND METHODS

It was a hospital based cross sectional study conducted in the Department of Obstetrics and Gynaecology of S.M.S. Medical College, Jaipur. 350 post partum women who gave written informed consent to participate in the study were included. Women who delivered a still born or had intra uterine foetal death or whose newborn was admitted in neonatal intensive care unit were excluded. A predesigned questionnaire was used to collect data regarding pre lacteal feeding practices of newborns, the type of pre lacteal feed used and various beliefs associated with it. Data were analyzed statistically and a p value <0.05 was considered significant.

RESULTS

Out of 350 postpartum women studied 75.7% admitted that pre lacteal feed was given to the newborn (Table 1). Table 2 shows various features of pre lacteal feed. Out of 265 newborn 79.3% received pre lacteal feed between 1 - 4 hours and 13.2% received within 1 hr.

Table 1. Distribution according to pre lacteal feed given

Variables	Numbers (350)	Percentage
Pre lacteal feed given		
yes	265	75.7
no	85	24.3

Cow milk was the commonest pre-lacteal feed given (30.2%) followed by honey (22.7%) and jaggery water (20.8%). Tea was given in 1.9% newborn. Majority of the newborn (52.8%) received pre lacteal feed from finger and 24.5% received it with spoon and remaining 22.7% received it with silver coin. Majority of the newborn (40.4%) received pre lacteal feed from grandmother, followed by grandfather (24.2%) and maternal grandmother (21.1). 11.3% received pre lacteal feed from aunt, uncle or sister. Table 3 shows various reasons for giving pre lacteal feed. Out of various beliefs, 49% were of the opinion that the newborn will acquire the qualities of the person who first gave pre lacteal feed. 36.6% gave as a family custom and tradition, 16.6% gave on elder's advice and 5.7%

believed that it would sooth the baby until true milk arrives. 17% believed that it will keep baby's mouth and throat moist, 11.7% believed that it is energy giving food.

Table 2. Features of pre lacteal feed

	Numbers (265)	Percentage
Time when child received pre lacteal feed after delivery		
<1 hr	35	13.2
1 -4 hr	210	79.3
>4 hr	20	7.5
Substance given as pre lacteal feed		
Plain water	15	5.7
Honey	60	22.7
Sugar water	50	18.7
Jaggery water	55	20.8
Cow milk	80	30.2
Tea	5	1.9
How pre lacteal Feed was given		
Finger	140	52.8
Spoon	65	24.5
Silver coin	60	22.7
Who initiated the Pre lacteal feed		
Maternal grand mother	56	21.1
Grandmother	107	40.4
Mother	8	3.0
Grandfather	64	24.2
Others	30	11.3

Table 3. Reasons attributed for giving pre lacteal feed

Reasons attributed for giving pre lacteal feed	Numbers	Percentage
Will acquire qualities of pre lacteal feed giver	130	49.0
Family custom	97	36.6
Elder's advice	44	16.6
Soothes the baby until true milk arrives	15	5.7
Insufficient milk	76	28.7
Keeps mouth and throat moist	45	17.0
Clears bowel of new born	6	2.3
Energy giving	31	11.7
Easy to digest	22	8.3
Promotes immunity in new born	8	3.0

Other beliefs were that it clears bowel of newborn (2.3%), easy to digest (8.3%) and promotes immunity in newborn (3.0%). Table 4 shows characteristics of study population with practice of giving pre lacteal feeding. Age of the mother, birth order of the child and sex of the child had no significant difference in the practice of pre lacteal feed. Pre lacteal feeding differed significantly ($p < .05$) with literacy status of the mother. Infants born to illiterate mothers were more likely (57.4%) to receive pre lacteal feeds compared to literate mothers (42.6%). Pre-lacteal feeding also differed significantly ($P=0.0002$) with mode of delivery. Infants born through caesarean section were more likely (52.5%) to receive pre-lacteal feeds compared to vaginal delivery (44.2%). Infants born in joint family (63.4%) received prelacteal feed more than in nuclear family (36.6%) and the difference was statistically difference ($p=0.004$).

DISCUSSION

In spite of the negative impact of prelacteal feeding on the growth and development of children, it remains widely practiced in Rajasthan. In our study practice of pre lacteal feed was seen in 75.7% case which was consistent with the results observed by Nguyen *et al* in their study (Nguyen, 2013), While our results were much higher than another study conducted in Ethiopia (11.1%) (Nigus Bililign, 2016). Variable results are reported regarding prevalence of pre lacteal feed in different states of our country.

Table 4. Relation of characteristics of study population with pre lacteal feed

Characteristics	Pre lacteal feed given (265)		Pre lacteal feed not given (85)		Chi square & p value
	No	%	No	%	
Age of the mother					χ^2 -0.0153,
<25	161	60.8	51	60.0	p-0.90
≥25	104	39.2	34	40.0	not significant
Literacy status of the mother					χ^2 -5.8286,
Illiterate	152	57.4	36	42.4	p- 0.01
Literate	113	42.6	49	57.6	Significant
Type of family					χ^2 -8.1694,
Nuclear	97	36.6	46	54.1	p-0.004
Joint	168	63.4	39	45.9	Significant
Birth order					χ^2 -0.1633,
1 st child	143	53.9	48	56.5	p-0.68
2 nd and above	122	46.1	37	43.5	not significant
Mode of delivery					χ^2 -13.5095,
Normal Delivery	117	44.2	57	67.1	p-0.0002
Cesarean Section	148	55.8	28	32.9	Significant
Sex of the child					χ^2 - 0.0062,
Male	139	52.5	45	52.9	p -0.94,
Female	126	47.5	40	47.1	not significant

A very low prevalence of pre lacteal feed was reported by Shankar R *et al* (Shankar, 2015), and Gupta *et al* (14.8% and 10.2% respectively). This could be because of higher literacy rate in Tamilnadu. However a slightly lower prevalence than our study was reported by Bhatia R *et al* (Bhatia, 2014), as 36% in a study done at Udaipur district of Rajasthan, 42.7% in rural Maharashtra as reported by Salve Dawal *et al.* (2014) and 52% in Mysore, Karnataka as reported by Singh *et al* (2012). In the studies done by Khan *et al* (2010), Raina *et al* a higher prevalence of pre lacteal feeding than in the current study (90% and 88% respectively) was found. In our study Cow's milk (30.2%) was the most common pre lacteal feed, followed by honey, jaggery water 20.8% and sugar water (18.7%). Our results were consistent with the results observed by Salve Dawal *et al* (Salve, 2014), and Wadde *et al* (Wadde, 2011), while in the study done by Shankar K *et al* (Shankar, 2015) and Ibadin *et al* sugar water (45.1% and 38.8% respectively) was found to be the most common pre lacteal feed. In our study the main reason for the pre lacteal feeding was the belief that the child would acquire the qualities of the person who gives pre lacteal feed (49.0%). Other reasons were family custom (36.6%), Insufficient milk (28.7%), keeps baby's mouth and throat moist (17.0%), elder's advice (16.6%) and provides energy to the child (11.7%). Our findings are consistent with findings observed by Salve Dawal *et al* who found insufficient milk/delayed lactation (31.25%), elder's advice (29%) and family custom (25%) to be the commonest reasons for giving pre lacteal feed. Insufficient milk was the reason in 28.7% cases in our study while in the study conducted by Ibadin *et al* (Ibadin, 2013), and Roy *et al* (Roy, 2009), insufficient milk was the reason for giving pre lacteal feed in 51.1% and 62.9% respectively.

There was no significant association between the sex of child and the pre lacteal feeding in our study which is also observed in the studies done by Gupta *et al* (Gupta, 2012), and Shankar *et al.* (Shankar, 2015). In our study literacy status of the mother was found to be significantly associated with pre lacteal feeding practices. The infants born to illiterate mothers (57.4%) received pre lacteal feed more than literate mothers (42.6%). Our observations were consistent with that observed by Shankar *et al* (Shankar, 2015) and Raval *et al* (Raval, 2011), who also reported that more number of infants born to illiterate mothers received pre lacteal feed.

Practice of pre lacteal feed was more in women from joint family (63.4%) compared to women from nuclear family (36.6%) and the difference was statistically significant (p - 0.004). Similar association was observed by studies done by Salve Dawal *et al* and Shankar *et al* Mode of delivery also had significant effect on pre lacteal feed (p -0.0002). More numbers of Infant born by cesarean section (55.8%) received pre lacteal feed compared to those born normally (44.2%). This was due to their belief that mother would not be able to breastfeed the child for few hours of cesarean. Our results were consistent with Lakati *et al* (Lakati, 2010), who observed that pre lacteal feeding significantly differ with mode of delivery.

Conclusion

Pre lacteal feeding practices are still very high in our society because of the family customs and tradition. Repeated counseling of the expecting mothers during ante natal clinics and immediately after giving birth is required to promote exclusive breastfeeding practices and to eradicate pre lacteal feeding behaviors. Community health volunteers, mass media should be involved to educate mothers as well as their family members on the potential harms of prelacteal feeding.

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