



BREAST FEEDING PRACTICES AMONG POST NATAL MOTHERS IN A TERTIARY CARE HOSPITAL IN THRISSUR DISTRICT, KERALA, INDIA

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Article Received on 13/04/2016

Article Revised on 04/05/2016

Article Accepted on 24/05/2016

ABSTRACT

Introduction: Breast feeding is the most precious gift a mother can give her infant. The beneficial effect of breastfeeding depends on time of breastfeeding initiation, its duration and the age at which the breastfed child is weaned. 22.3% of neonatal deaths can be prevented by early initiation of Breastfeeding. In India it will account to saving 250,000 newborn babies annually. **Objective:** To determine the breast feeding practices and its association between selected socio-demographic characteristics among postnatal mothers in a tertiary care hospital in Thrissur district, Kerala, India. **Methods:** A cross-sectional study was conducted among postnatal mothers admitted in postnatal wards of tertiary care hospital during the month of November 2014 to January 2015. A total of 100 postnatal mothers were interviewed using an interview schedule. **Results:** Of all the mothers 51% belonged to the age group of 25-29 years and 40% of mothers belonged to 20-24 age group. All mothers were literate with 25% of mothers were graduate and 38% of them had educational status up to higher secondary level. 58% of mothers initiated breastfeeding within one hour of delivery. A statistically significant association between educational status of mothers and initiation of breast feeding and colostrum feeding were obtained from this study. **Conclusion:** Health education of mothers during antenatal period, as well as care givers is essential to improve breast feeding practices in our country.

KEYWORDS: Breast feeding, Colostrum, Prolactal feeds, Postnatal mothers.

INTRODUCTION

Breastfeeding is the most precious gift a mother can give her infant. It is the safest, least allergic and best infant feeding method. Breast milk alone is the ideal nourishment for infants for the first six months of life, and also their "first immunization". It contains all the nutrients antibodies, hormones and antioxidants that an infant needs to thrive- "the nurture provided by nature".^[1] As per the recommendation of UNICEF, breast feeding should be initiated within half an hour of birth. Studies have shown that breastfeeding is superior to infant formula feeding because of its protective properties against illness, in addition to its nutritional advantages. It is one the most cost effective ways to reduce infant morbidity and mortality from diarrheal disease, respiratory disease and other infections. It also protects the child from chronic diseases like type 2 diabetes and obesity in latter life.^[2] Early initiation of breast feeding lowers mothers risk of PPH and anaemia, boosts mothers immune system, delays next pregnancy and reduces the insulin of diabetic mother. It also protect mother from ovarian & breast cancer.^[3] Researches have repeatedly revealed that, when mothers do not start

breastfeeding early, their babies do not develop normal feeding patterns, until the fourth or fifth day. The reason is that the suckling reflex is strongest in the first half-hours after and thereafter it fades. Therefore, it is important to provide proper information to the mother and family regarding early initiation. The World Health Organization recommends that breastfeeding be initiated within 1hour of birth. Despite these recommendations, only 39% of newborns in the developing world are put to the breast within one hour of birth.^[4] It has been reported that if breastfeeding can be initiated within one hour after birth then 22.3% neonatal deaths can be prevented. In India it will account to saving 250,000 newborn babies annually.^[5]

The Government of India recommends that initiation of breastfeeding should begin Immediately after childbirth, preferably within one hour. It provides constant positive interactions between mother and child which can contribute to emotional and psychological development of infants and enhances "Maternal-infant Bonding."^[6] The first breast milk (colostrum) is highly nutritious and has antibodies that protect the newborn from diseases.

Late initiation of breastfeeding not only deprives the child of valuable colostrum, but becomes a reason for introduction of prelacteal feeds (that is, something other than breast milk) like glucose water, honey, animal milk, or powdered milk that are potentially harmful and contribute to diarrhoea in the newborn. The practice of prelacteal feeding, may also be culturally and family-specific. Prelacteals given to the newborn are thought to have positive effects on the baby's gastrointestinal and genitourinary systems according to Hindu cultural and religious beliefs. Prelacteals, like honey and ghee, are thought to evacuate meconium, reduce colic, and act as a laxative. Prelacteals given in Muslim families include the Holy Zam-Zam water, to clean baby's bowels, keep the mouth and throat moist, keep the body warm, to promote rapid growth, and to soothe the baby until the true milk arrives.^[7] Using water as a prelacteal feed decreases the amount of time the infant suckles at the breast, leading to decreased milk supply. Water from an unsafe source can itself be a direct cause of infection. Honey is a known source of the heat resistant organism *Clostridium botulinum*, which can lead to infant botulism^[8] Colostrum is discarded because of a belief that its thickness and viscosity may be difficult for the newborn to swallow and digest. Also, there are beliefs that the first breast milk is "stale," or "old" from being stored in the breasts for the duration of the pregnancy. WHO/UNICEF strongly discourages the traditional practice of pre-lacteal feeding unless medically indicated.^[9]

The District Level Household survey 4 (DLHS4) from Thrissur district shows that 100% deliveries were occurring in hospital, where delivery is attended by a trained gynaecologist. But initiation of breast feeding immediately after delivery is often a challenge & breast feeding practices varies with different institution. Immediate postnatal period (1st week after delivery) is golden period for postnatal mothers for establishing maternal-infant bonding & practicing correct method of breastfeeding. Health care workers and family members should encourage the postnatal mother for practicing proper breast feeding. We conducted the research to determine the breast feeding practices and the association between selected socio-demographic characteristics among postnatal mothers in a tertiary care hospital in Thrissur district, Kerala

MATERIALS & METHOD

A cross –sectional study was conducted among post natal mothers admitted in postnatal wards of tertiary care hospital in Thrissur district, Kerala. All postnatal mothers admitted in postnatal wards during the period of November 2014 to January 2015 were included in the study and those mothers having contraindication for breastfeeding and mothers with babies having contraindication for breastfeeding were excluded. A total

of 100 postnatal mothers were interviewed using an interview schedule. Data was analysed using SPSS version 16 software and Pearson's chi-squared test was used for finding out association between various categorical variables.

RESULTS

Of all 100 mothers, 51 belonged to 25-29 age group, 40 mothers belonged to 20-24 age group and remaining 9 mothers belonged to 30 and above age group. Half of mothers 50% belonged to Hindu religion, 22% belonged to Christian & remaining 28% of mothers belonged to Muslim religion. In this study all mothers were literate and belonged to Above Poverty Line family. 38% of mothers had educational status up to higher secondary level & 25% of mothers were graduate. Even though most of them were educated up to higher secondary level and above only 38% of the mothers were employed and 62% of mothers were homemakers. 49% of mothers were primipara and 51% were multipara. 71% of mothers had normal delivery & 29% of mothers had LSCS. 16% of mothers had low birth weight babies & 15% of mothers had preterm babies.

In this study 58% of mothers initiated breast feeding within one hour and 33% of mothers initiated breastfeeding after one hour but within six hours. 9% of mothers initiated breastfeeding after six hours. There is statistically significant association between initiation of breastfeeding within 1 hr and educational status of mother (p value 0.01, mode of delivery (p value <0.001) and weight of the baby (p value <0.001) [Table 1]

In the present study 34% of mothers had given some form of prelacteal feed to their babies. Prelacteal feeding practices is high among Muslim religion i.e 85.7% and most common substance used for prelacteal feed is zam zam water.(holy water from Mecca).[Table 2] There is statistically significant association between prelacteal feeding practices and educational status of mothers (p value-0.017), religion (p value-<0.001), initiation of breast feeding (p value<0.04)[Table 3] It was found that 86% of the mothers fed babies with colostrum and 14% of them discarded colostrum. Among those mothers who had discarded colostrum, 6 mothers thought that colostrum would be difficult for their child to digest, 6 of them said that colostrum contains impurities from mother, which would be harmful to the child and 2 of them thought that baby will be sick. There is a statistically significant difference between colostrum feeding and educational status (pvalue-0.016) and occupation of mother (p value-0.01). [Table 4].

Table :1 Association between selected socio-demographic variables and initiation of breastfeeding within one hour among study population.

Association between selected socio-demographic variables and initiation of breastfeeding within one hour among study population					
	Particulars	Frequency (%) n=100	Initiation of Breast feeding within 1hr		P value
			Yes (%) n=58	No (%) n=42	
Educational status	School Education	21(21%)	9(42.9%)	12(57.1%)	0.01
	Higher secondary	38(38%)	20(52.6%)	18(47.4%)	
	Graduate	25(25%)	17(68%)	8(32%)	
	Post graduate	16(16%)	12(75%)	4(25%)	
Occupation	Housewife	62(62%)	31(50%)	31(50%)	0.06
	Working mothers	38(38%)	27(71.05%)	11(28.9%)	
Religion	Hindu	50(50%)	33(66%)	17(34%)	0.06
	Christian	22(22%)	14(63.6%)	8(36.4%)	
	Muslim	28(28%)	11(39.3)	17(60.7%)	
Parity	Primipara	49(49%)	33(67.3%)	16(32.7%)	0.06
	Multipara	51(51%)	25(49%)	26(51%)	
Mode of delivery	Normal delivery	71(71%)	56(78.8%)	15(21.2%)	<0.001
	Caesarean section	29(29%)	2(6.9%)	27(93.1%)	
Weight of Newborn	Wt >2.5kg	84(84%)	56(66.7%)	28(33.3%)	<0.001
	Wt <2.5kg	16(16%)	2(12.5%)	14(87.5%)	

Table :2 Prelacteal feeding Practices among the study population.

	Particulars	Number (percentage)
Prelacteal feed	Not given	66(66%)
	Given	34(34%)
Type of Prelacteal feed	Water (zam zam water)	26(26%)
	Honey	6(6%)
	Vayambu	2(2%)
Reason for giving prelacteal feed	Advised by elders	9(9%)
	Cultural practices	22(22%)
	To clean the bowel	3(3%)

Table 3: Association between selected socio-demographic variables and Prelacteal feeding practices among study population.

Association between selected socio demographic variables and prelacteal feeding practices among study population.					
	Particulars	Frequency (%) n= 100	Prelacteal feed		P value
			Given(%) n=34	Not given(%) n=66	
Educational status	School education	21(21%)	11(52.4%)	10(47.6%)	0.017
	Higher secondary	38(38%)	12(31.5%)	26(68.4%)	
	Graduate	25(25%)	8(32%)	17(68%)	
	Post graduate	16(16%)	3(18.7%)	13(81.2%)	
Occupation	Housewife	62(62%)	23(37.09)	39(62.9%)	0.4
	Working mothers	38(38%)	11(28.9%)	27(71.05%)	
Religion	Hindu	50(50%)	5(10%)	45(90%)	<0.001
	Christian	22(22%)	5(22.7%)	17(77.2%)	
	Muslim	28(28%)	24(85.7%)	4(14.3%)	
Initiation of breast feeding within 1hr	Within 1hr	58(58%)	15(25.9%)	43(74.1%)	0.04
	>1hr	42(42%)	19(45.2%)	23(54.7%)	

Table :4 Association between selected socio-demographic variables and colostrum feeding among study population.

Association between selected socio demographic variables and colostrum feeding among study population					
	Particulars	Frequency(%) n= 100	Colostrum		P value
			Given (%) n=86	Not Given n=14	
Educational status	School education	21(21%)	19(90.5)	2(9.5%)	0.016
	Higher secondary	38(38%)	33(86.8%)	5(13.2%)	
	Graduate	25(25%)	21(84%)	4(16%)	
	Post graduate	16(16%)	13(81.2%)	3(18.8)	
Occupation	Housewife	62(62%)	49(79%)	13(21%)	0.01
	Working mothers	38(38%)	37(97.3%)	1(2.7%)	
Religion	Hindu	50(50%)	42(84%)	8(16%)	0.72
	Christian	22(22%)	20(91%)	2(9%)	
	Muslim	28(28%)	24(85.7%)	4(14.2%)	
Initiation of breast feeding within 1hr	Within 1hr	58(58%)	51(88%)	7(12%)	0.51
	>1hr	42(42%)	35(83.3%)	7(16.6%)	

DISCUSSION

In this study 58% of mothers initiated breast feeding within 1hr after delivery which was lower when compared with DLHS 4^[10] survey where, 84.4% of newborns received breast milk within 1hr after delivery in Thrissur district. Study conducted in Pondicherry^[11] showed that 92% of the mothers knew that, following a normal delivery, breast feeding should be initiated within 1 hour. But only 36% of them practiced.

Another study conducted by Anteo Di Napoli,^[12] showed that a low level of maternal education, determines a negative effect on the initiation and duration of breast feeding. In the present study 34% of mothers had given some form of prelacteal feeds to their newborns. In another study by from Kannur^[13], showed that 59.4% of the mothers had given prelacteal feeds in their previous deliveries.

Study from Pondicherry^[11], found out that 74% of postnatal mothers knew that prelacteal feeds should not be given to infants. In the present study 86% of mothers fed their babies with colostrum and 14% discarded colostrum. This result was similar to other study done in Udaipur^[14] were 83% of mothers administered colostrum to their babies.

CONCLUSION

The study revealed that inspite of high female literacy rate in Kerala, initiation of breast feeding within one hour after delivery was only 58% and 34% of mothers practised prelacteal feeding and 14% of mothers discarded colostrum. Health education of mothers during antenatal period, as well as care givers is essential to improve breast feeding practices in our country. Gynaecologists, staff nurse and paediatrician have a great role in promoting proper breast feeding practices. Trainings for the health workers must stress on need for appropriate and timely counselling of pregnant women on breastfeeding practices.

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