

Breast feeding practices in Bellary, Karnataka: A hospital based study.

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Abstract

Background: Breast feeding in India is a universal phenomenon and in large number of communities the practices vary vastly because of different socio-cultural practices. The current study was designed to know the level of knowledge and to assess the correct feeding practices among postnatal mothers.

Materials and Methods: A hospital based cross-sectional study was done in postnatal wards of Vijayanagara Institute of Medical Sciences, Bellary, Karnataka. Mothers were interviewed to collect information about the baseline socio-demographic and obstetric characters of mothers and also consisted the questions to know the level of knowledge. To assess the position of the baby and attachment of baby to mothers, they were observed while breast feeding, if they had already fed the baby then they were observed during the next feed.

Results: A total of 240 mothers were interviewed during the study period. 102 (42.5%) mothers had the correct knowledge about initiation of breast feeding within an hour, however only 96 (40.0%) mothers had initiated breast feeding within a hour. About 220 (91.7%) of mothers knew about colostrums feeding but 234 (97.5%) of mothers add actually fed their babies with colostrum. By adopted scoring system 156 (65%) of mothers with babies had correct position while feeding and 136 (56.6%) of babies had correct attachment to their mothers.

Conclusion: The study emphasizes on imparting a correct knowledge regarding importance of breast feeding to mothers especially during ANC's .Regarding breast feeding practices mothers should be observed while feeding and should be corrected with demonstration.

Keys words : Breast Feeding,

Introduction

Breast milk is the unique gift from mother to the baby, and best start for the life. Mother's milk is a complete food with all the essential nutrients that are necessary for the growth and development of the baby for the first few months of life. Breast milk provides a considerable protection against not only diarrheal diseases but also against respiratory infections. It also promotes a bonding between mother and baby.¹

As a whole breast feeding is associated with a wide spectrum of health benefits to the mother and baby, social and economic benefits to the community, and reducing child morbidity and mortality. Understanding the importance of breast milk WHO and UNICEF advocates exclusive breast feeding.²

The beneficial effects of breast feeding depend on breastfeeding initiation, its duration and the age at which weaning was started.³

According to NFHS survey only 23.5% of newborn babies were put on breast feeding within an hour of birth and 37% initiated breast feeding within one and 43% of mothers had not given any pre lacteal feed.⁴

In India breast feeding is universal phenomenon. However the reasons for existing child malnutrition and mortality may be the poor knowledge and incorrect practices. The practices of breast feeding are mainly influenced by social, cultural and other related factors.³

Breastfeeding practices vary among different regions and communities. In India they are influenced by socio-economic factors, cultural background, psychological status, religious values and literacy rate. For the effective breast feeding the correct practices like proper positioning of baby to the mother and attachment of child to the mother's breast play a crucial role.⁵

So, the current study was designed to know the level of knowledge and to assess the correct feeding practices among postnatal mothers.

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Materials and Methods

A hospital based cross-sectional study was done in postnatal wards of Vijayanagara Institute of Medical Sciences, Bellary, Karnataka.

A total of 240 mothers who delivered normally and by LSCS both preterm and term gestation were interviewed during the study period from February to April 2013 both were included.

Mothers were interviewed after obtaining a informed consent using a pretested, semi structured and validated questionnaire was used to collect information about the baseline socio-demographic and obstetric characters of mothers and also consisted the questions to know the level of knowledge. To assess the position of the baby and attachment of baby to mothers, they were observed while breast feeding, if they had already fed the baby then they were observed during the next feed using WHO-Breast feed form.⁶

For assessing the knowledge arbitrary scoring method was used. The arbitrary grading system was also used to assess the position and attachment, out of 4 criteria mothers were grouped in to correct position and good attachment if they fulfilled 3 criteria.⁷

A database was created in MS Excel and analysed using SPSS 16 version. Variables presented as percentages and chi-square test was used as test of significance.

Results:

A total of 240 mothers were interviewed during the study period. The age of the mothers ranged between 15 to 35 and 122(50.8%) being in the age group 20-25. The majority of mothers were illiterates 86 (35.8%) and were housewives 134 (55.8%) by occupation. Most of the mothers 192 (80%) were hindu by religion and were from joint family 172 (71.7%). Most of the mothers 97 (40.4%) belong to class-4 according modified B.G.Prasad classification.

About 104 (43.3%) mothers were primipara. 156 (65%) mothers had more than 3 ANC's 94 (39.2%) had taken antenatal checkups at district hospital, 86 (35.8%) from private hospital. For 134 (55.8%) mothers had got home visits done by health workers. 128 (53.3%) mothers had delivered by LSCS and 112 (46.7%) had delivered normally.

In our study 102 (42.5%) mothers had the correct knowledge about initiation of breast feeding within an hour, however only 96 (40.0%) mothers had initiated

Table :1 Sociodemographic profile of mothers

Variables	Frequency	Percentage (%)
1. Age in years		
<20	70	29.2
20-25	122	50.8
>25	48	20
2. Education		
Illiterate	86	35.8
Primary	70	29.2
High School & above	84	35
3. Occupation		
Housewife	134	55.8
Unskilled & others	106	44.2
4. Religion		
Hindu	192	80
Muslim & others	48	20
5. Type of family		
Nuclear	68	28.3
Joint	172	71.7
6. Modified B.G. Prasad classification		
Class-III	63	26.33
Class-IV	97	40.4
Class-V	80	33.3

Table : 2 Obstetric profile of mothers

Variables	Frequency	Percentage (%)
1. Para		
1	104	43.3
2	100	41.7
3	36	15
2. No. of ANC's taken		
<3	84	35
>3	156	65
3. Place of ANC taken		
PHC	42	17.5
CHC	18	7.5
District hospital	94	39.2
Private hospital	86	35.8
4. Home visits done by health worker		
Yes	134	55.8
No	106	44.2
5. Mode of delivery		
Normal	112	46.7
LSCS	128	53.3

breast feeding within an hour. About 46 (53.5%) of illiterate mothers, 28 (58.3%) of mothers of muslim community had had done early initiation. 46 (54.8%) of mothers who had less than three ANC's and 44 (51.2 %) mothers who had availed there ANC's from private hospital had done practiced initiation correctly. About 60 % mothers had given the correct answer about prelacteal feeding but in practice only 116 (48.3%) of mothers had not given any prelacteal feed to newborns. About 97% of illiterate mothers, 94.3% of unskilled laborers and 93.8% of hindu mothers had not given any prelacteal feeding which were statistically significant. 96.2% of primi paras and 96.4% of mothers who delivered normally had not given any prelacteal feeding and proved statistically significant. The commonest prelacteal feeds used were honey and sugar water.

About 220 (91.7%) of mothers knew about colostrums feeding but 234 (97.5%) of mothers add actually fed their babies with colostrum. 180 (75%) of mothers knew about demand feeding and 202 (84.2%) of mothers had given correct answer about exclusive breast feeding for 6 months.

Table : 3 Knowledge about breast feeding among mothers

Factors	Correct answer
1. Time of initiation of breast feeding	096 (40%)
2. Prelactel feeding should not be given	146 (60.8%)
3. Colostrum feeding should be done	220 (91.7%)
4. Exclusive breast feeding should be done for 6 months	202 (84.2%)
5. Knowledge about demand feeding	180 (75%)

Table 4: Sociodemographic variables with breast feeding practices

Variables	Early initiation (n=96)	Prelacteal feeding not given(n=126)	Correct position (n=156)	Correct attachment (n=136)
1.Age in years				
<20	24 (34.3%)	66 (94.3%)	50 (71.4%)	36 (51.4%)
20-25	54 (44.3%)	106 (86.9%)	70 (57.3%)	72 (59.0%)
25-30	18 (37.5%)	44 (91.7%)	36 (75%)	28 (58.3%)
	2.001 (p=0.368)	2.839 (p=0.236)	6.498(p=0.039)	1.111 (p=0.574)
2.Education				
Illiterate	46 (53.5%)	84 (97.7%)	60 (69.7%)	40 (46.5%)
Primary	24 (34.3%)	60 (85.7%)	36 (51.4%)	46 (65.7%)
High School	26 (31.0%)	72 (85.7%)	60 (71.4%)	50 (59.5%)
	10.337 (p=0.006)	8.771(p=0.112)	8.052 (p=0.018)	6.225 (p=0.045)
3.Occupation				
Housewife	44 (32.8%)	116 (86.6%)	94 (70.1%)	72 (53.7%)
Unskilled	52 (49.1%)	100 (94.3%)	62 (58.4%)	64 (60.3%)
	6.488 (p=0.110)	3.973 (p=0.046)	3.356 (p=0.685)	1.065 (p=0.302)
4.Religion				
Hindu	68 (35.4%)	180 (93.8%)	126 (65.6%)	108 (56.2%)
Muslim	28 (58.3%)	36 (75.0%)	30 (62.5%)	28 (58.3%)
	8.403 (p=0.004)	15 (0.000)	0.165 (p=0.685)	0.068 (p=0.794)
5.Type of family				
Nuclear	28 (41.2%)	64 (94.1%)	44 (64.7%)	34 (50%)
Joint	68 (39.5%)	152 (88.4%)	112 (65.1%)	102 (59.3%)
	0.005 (p=0.815)	1.788 (p=0.181)	0.004 (p=0.952)	1.717 (p=0.190)
6.Monthly family income				
Class-III	24 (38.1%)	57 (90.5%)	37 (58.7%)	51 (80.9%)
Class-IV	34 (35.1%)	84 (86.6%)	73 (75.2%)	47 (48.4%)
Class-V	38 (47.5%)	75 (93.8%)	46 (57.5%)	38 (47.5%)

Table no 5: Obstetric variables with breast feeding practices

Variables (n=96)	Early initiation given(n=126)	Prelacteal feeding not (n=156)	Correct position (n=136)	Correct attachment
1. Para				
1	38 (36.5%)	100 (96.2%)	66 (63.4%)	54 (51.9%)
2	44 (44.0%)	88 (88.0%)	66 (66.0%)	64 (64.0%)
3	14 (38.9%)	28 (77.8%)	24 (66.6%)	18 (50.0%)
	1.204 (p=0.548)	10.796 (0.005%)	0.196 (0.907)	3.795 (p=0.150)
2. No. of ANC's taken				
<3	46 (54.8%)	78 (92.9%)	58 (69.0%)	42 (50.0%)
>3	50 (32.1%)	138 (88.5%)	98 (62.8%)	94 (60.2%)
	11.734(p=0.001)	1.172 (p=0.279)	0.931 (p=0.335)	2.339 (0.126)
3. Place of ANC taken				
PHC	10 (23.8%)	42 (100%)	22 (52.3%)	28 (66.6%)
CHC	6 (33.3%)	16 (88.9%)	06 (33.3%)	06 (33.3%)
District hospital	36 (38.3%)	80 (85.1%)	68 (72.3%)	62 (65.9%)
Private hospital	44 (51.2%)	78 (90.7%)	60 (69.7%)	40 (46.5%)
	9.499 (p=0.023)	7.239 (p=0.065)	13.959 (p=0.003)	12.617 (p=0.006)
4. Home visits done by health worker				
Yes	60 (44.8%)	120 (89.6%)	88 (65.6%)	70 (52.2%)
No	36 (34.0%)	96 (90.6%)	68(64.1%)	68(64.1%)
	2.884 (p=0.089)	0.068 (p=0.795)	0.060 (p=0.806)	2.422 (p=0.120)
5.Mode of delivery				
Normal	40 (35.7%)	108 (96.4%)	88 (78.5%)	86 (76.7%)
LSCS	56 (43.8%)	108 (84.4%)	68 (53.1%)	52 (40.6%)
	1.607 (p=0.205)	17.002 (p=0.000)	8.964 (p=0.003)	

By adopted scoring system 156 (65%) of mothers with babies had correct position while feeding and 136 (56.6%) of babies had correct attachment to their mothers. A correct position was observed in greater proportion 36 (75 %) of mothers in the age group of 20-25 and 60 (69.7%) of mothers who were illiterates which were proved statistically significant.68 (72.3%) of mothers who had done there antenatal checkups at district hospital.88 (56.4%) mothers who had delivered normally.

Discussion:

A correct knowledge about breast feeding is the right of the mother. All the mothers in our study had at least one ANC and one home visit by health worker but only 40% of mothers knew about early initiation of breast feeding, but in a similar study done by Maheshwari Ekambaram et al 90% of mothers knew about early initiation large amount of this difference may be attributed to the failure

on the part of our health care facilities to impart correct knowledge. However similar findings were observed in other aspects of breast feeding.⁸

In our study about 91.7% of mothers knew about colostrum feeding which was similar to studies done in other parts of India i.e 75%-90%.⁹

In our study 40% of mothers had done early initiation of breast feeding. In a study done by MC Yadavannavar et al only 23.3% mothers had done early initiation, the larger number of early initiation in our study may be because of our study set up which was hospital and who will be under constant support and observation from hospital staff.¹⁰ but studies done in various parts show early initiation from 16 to 54.5%.¹¹

Our study setting being a tertiary care hospital but also only 48.3% mothers had not given any prelacteal feed to their babies. A large proportion of unskilled and other occupation mothers and mothers from hindu community

had not given any prelacteal feed. We observed a positive association between no prelacteal feed to primiparas and mothers who delivered normally.

97% of mothers had fed the babies with colostrums however in a study done by M C Yadavannavar et al only 35% of mothers had given colostrum, but 81.6% mothers had fed the babies with colostrum in a study done by Tiwari et al in north India.¹¹

About 65% of mothers had the correct position of babies while feeding and increasing age of the mother was positively associated, a similar finding was observed in a study done by Gupta et al Mothers from the class-5 socio-economic income group and multiparous women had good attachment but there was no statistically significant. In a study done by Gupat et al. Mothers who had their ANC in private hospital and district hospital had better position and mother delivered normally which were proved statistically significant.¹²

56.6% of mothers had a correct attachment with their babies. A statistically significant association was observed between mothers from high income families and mothers who had delivered normally.

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Standard deviation

The **standard deviation** is a statistics that tells how tightly all the various examples are clustered around the mean in a set of data. When the examples are pretty tightly bunched together and the bell-shaped curve is steep, the standard deviation is small. When the examples are spread apart and the bell curve is relatively flat, that tells a relatively large standard deviation. One standard deviation away from the mean in either direction on the horizontal axis accounts for somewhere around 68 percent of the people in this group. Two standard deviations away from the mean account for roughly 95 percent of the people and three standard deviations account for about 99 percent of the people.