

Original Research Article

A Study to Assess the Breast Feeding Practices among Mothers, Who Come At the Immunization Clinic, Tertiary Care Hospital, India

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ABSTRACT

Introduction: Breast milk is the ideal food for the infant. No other food is required to be given until six months after birth. Breastfeeding is one of the most important determinants of child survival, birth spacing and prevention of childhood infections. Research Question: What is the prevalence of exclusive breast feeding practices and various other characteristics. Objective: To assess the prevalence of exclusive breast feeding practices and their characteristics among mothers in Rewa city, Madhya Pradesh.

Methods: Cross sectional institutional study was conducted in 106 mother with their baby < 1 year, who brought her baby for immunization at the immunization clinic, S.G.M.H. Rewa Madhya Pradesh. Data was collected by examiner themselves using a pre designed & pre tested questionnaire after taking a verbal consent then data was compiled and analyzed with the help of InStat- Graph Pad software.

Results: The study revealed that out of 106 mothers who were interviewed, 103 (97.16%) have hospital delivery. 61(57.54%) were male child and 45(42.45%) were female child, Out of which 31 (29.24%) initiated breast feeding within one hour of delivery, 66 (62.26%) mothers gave Prolactal feeds, 65(61.32%) mothers gave colostrum to the baby, 43 (40.56%) mothers did exclusive breast feeding for six months, 31 (29.24%) mothers added supplementary feeding at 6 months of age.

Conclusions: we concluded that the most of the mothers initiate breast feeding to her child was after 1 hour and within 4 hours, colostrum given pattern to child was increase but still not good we need to focus on that practices.

Keywords: Breast feeding practices, colostrum, exclusive breast feeding, supplementary feeding.

INTRODUCTION

Breast milk is the ideal food for the infant. No other food is required to be given until six months after birth. Breastfeeding is one of the most important determinants of child survival, birth spacing and prevention of childhood infections.^[1] Malnutrition of the child can start from infancy itself which is mainly due to poor infant feeding, poor knowledge about significance of breast feeding, especially the exclusive breast

feeding. WHO took the lead and recommended ten steps for promoting, protecting & supporting breast feeding.^[2] Exclusive breast feeding takes care of the two essential elements of newborn care - nutrition and infection control. Exclusive breast feeding should be practiced for 6 months, due to risk of infection through contaminated food and water especially in poor countries.^[3] Pre-lactal feeds carry the risk of infection, delay the establishment of lactation^[4] and also

interfere with maintenance of lactation. [5] Exclusive breast fed babies don't require water even in hot climate

A beneficial effect of breastfeeding depends on breastfeeding initiation, duration and the age at which the breast-fed child is weaned. In rural areas the beliefs of the community is influenced by social, cultural and economic factors which in turn has an impact on knowledge and practices related to breastfeeding. At the age of six month breast milk should be supplemented by additional foods rich in protein and other nutrients. Breast feeding should be initiated within an hour of birth. It helps to establish feeding & a close mother-child relationship. Early initiation of breast feeding lowers the mother's risk of post-partum hemorrhage & anemia. Colostrum contains high concentration of protein & other nutrient the body needs. It is also rich in anti-infective factors which protect the baby against respiratory infections & diarrheal diseases. [6] The promotion of early & exclusive breast feeding is a well-recognized strategy for child survival. [7] Pre-lacteal feeds are strictly prohibited because not only they introduce infection but also replace colostrum and interfere with sucking. [8] By keeping all these things in mind the study was done with the objective of to assess the exclusive breast feeding practices among mothers in the Rewa city M.P.

MATERIALS & METHODS

This is a hospital based descriptive type of observational, cross sectional study was carried out Among a representative sample of mothers having baby less than one year come for vaccination at the vaccination center , S.G.M.H. Sample was randomly selected between 15th July 2015 to 15th September 2015. So the total calculated sample size by applying a formula that. $Sample\ Size = \frac{4PQ}{L^2}$, P= prevalence of exclusive breast feeding, in Madhya Pradesh it was 41.5% according to AHS 2012-13 [9] and in Rewa it was

34.6% and here L= Allowable error it was taken as 10% , we got calculated sample size was 90.51% so we interviewed total 106 mother with the help of predesigned and pretested questionnaires after applying inclusion and exclusion criteria's, The inclusion criteria's of present study that

1. Mother who give verbal consent for participation in the study.

2. Mother who have baby of < 1 year.

The exclusion criteria's were –

1. Mother who not willing to participate in the present study.

2. Mother who have baby > 1 year when we come contact with him.

The study was conducted in compliance with Ethical principles for medical research involving human subjects. Invasive procedure and active interventions was not done in the study and informed verbal consent was taken. In the present study we included only mother who have baby < 1 year to reduce the chances of recall bias about the various question. Data was collected by examiner themselves then data was compiled and analyzed with the help of InStat- Graph Pad software.

RESULTS

In the present study the Total sample size was 106 mothers after applying inclusion and exclusion criteria's. We found that most 67.92% of the mother belong to 20-24 year age group and least common age group was age >30 years, and on the basis of education most of the mother were lower educated as primary 30.18% and middle education 53.77% and least 7.54% were have higher education as graduate and above. Most 72.63% of the mother were belong to lower socio-economic status of Grade-IV and V and out of 106 mother, 69.81% mother were employed and 30.18% were of house wife, 58.49% mother were of Primipara and 41.50% mother were of Multipara, and in the present study 97.16% Delivery conducted at hospital and only 2.83% were

at home, 57.54% baby were male child and 42.45% baby were of female child, 68.86% mother belong to Joint family and only 31.13% were from Nuclear family. (Table 1)

we observed the various breastfeeding characteristics of the study population and we found that most common 58.49% mother were initiate to breastfeed to her baby within 1-4 hours

and only 1.88% were initiate breastfeed to her baby after 24 hours, Colostrum is given in only 61.32% children's, only 40.46% baby were exclusively breastfeed up-to six month, and prelacteal feed was given in 62.26% and not given in 37.73% children and supplementary feeding was initiated before six month in 50% children at the end of six-month 29.24% and after six-month in 20.75% children. (Table 2)

Table 1: Distribution of the study population by Socio demographic characteristics (n=106)

S.N.	Socio-demographic profile	No. of participants	Percentage
1.	Mothers Age (years)		
	(a) < 19	8	7.54
	(b) 20-24	72	67.92
	(c) 25-29	23	21.69
	(d) >30	3	2.83
2.	Education		
	(a) Illiterate	9	8.49
	(b) Primary	32	30.18
	(c) Secondary/Higher secondary	57	53.77
	(d) Graduate and above	8	7.54
3.	Socioeconomic status (Modified BG Prasad's classification)		
	(a) Class- I	1	0.94
	(b) Class- II	6	5.66
	(c) Class- III	22	20.75
	(d) Class- IV	47	44.33
	(e) Class- V	30	28.30
4.	Mothers Employed		
	(a) Yes	32	30.18
	(b) No	74	69.81
5.	Mother was		
	Primipara	62	58.49
	Multipara	44	41.50
6.	Delivery place at		
	Hospital	103	97.16
	Home	3	2.83
7.	Present baby was		
	Male	61	57.54
	Female	45	42.45
8.	Family status		
	Joint	73	68.86
	Nuclear	33	31.13

Table 2: Distribution of the study population by Breast feeding characteristics (n=106)

S.N.	Characteristics of breast feeding	No. Of Participants	Percentage (%)
1.	Initiation of Breast feeding		
	(a) Within 1 hour of birth	31	29.24
	(b) Between 1-4 hours	62	58.49
	(c) Between 4-24 hours	11	10.37
	(d) > 24 hours	2	1.88
2.	Colostrum		
	(a) Given	65	61.32
	(b) Not Given	41	38.67
3.	Exclusive Breast feeding for 6 months		
	(a) Yes	43	40.56
	(b) No	63	59.43
4.	Pre-lacteal feeds		
	(a) Given	66	62.26
	(b) Not given	40	37.73
5.	Initiation of supplementary feeding		
	(a) Before 6 months	53	50
	(b) At 6 months	31	29.24
	(c) After 6 months	22	20.75

Table No.3 Present the association between various socio-demographic factors with the breast feeding characteristics

Sociodemographic characteristic.	Initiation of Breast feeding within 1 hour. (Total no.31)	Colostrum given (Total no.65)	Exclusive Breast feeding for 6 months (Total no.43)	Pre-lacteal feeds not given (Total no.40)	Initiation of supplementary feeding at 6 month (Total no.31)
Mothers Age (years)					
(a) < 19	3	4	2	4	6
(b) 20-24	21	43	31	28	33
(c) 25-29	6	14	9	7	11
(d) >30	1	2	1	1	2
Educational Status					
(a) Illiterate	1	3	2	00	1
(b) Primary	6	17	13	9	14
(c) Secondary	17	37	23	24	33
(d) Graduate	7	8	5	7	6
Socioeconomic status					
(a) Class- I	1	1	00	1	1
(b) Class- II	3	4	1	5	4
(c) Class- III	9	14	8	17	18
(d) Class- IV	12	31	21	11	20
(e) Class- V	6	15	13	6	9
Mothers Employed					
(a) Yes	13	17	4	18	3
(b) No	18	48	39	22	50
Family status					
Joint	20	46	24	26	40
Nuclear	11	19	8	14	13
Delivery conducted					
Hospital	31	65	41	40	52
Home	00	00	2	00	1
Baby was					
Male	21	43	30	26	33
Female	10	22	13	14	20

we shows the association between various socio-demographic characters with breastfeeding characteristics, in age group wise distribution we found breast feeding initiated within one hours, colostrum given to her child, exclusive breastfeeding, not-given any prelacteal feed, and initiation of supplementary feeding at six month all these characters were most common in 20-24 years mother, and mother were belong to lower socio-economic status, were of house-wife, belong to joint families, and have male child , and most importantly delivery conducted at hospital so they were properly counselled about all these good habit towards breastfeeding. And it may be because in the present study most of the mothers were of these socio-demographics group. (Table 3)

DISCUSSION

In the present study total sample size was 106, after applying exclusion and inclusion criteria's it was conducted at immunization Centre of S.G.M.H. Rewa M.P. within two month from 15th July 2015 to 15th September 2015, we

discussed various socio-demographics characteristics of the study populations that most 67.92% of the mother belong to 20-24 year age group and least common age group was age > 30 years, and distribution on the basis of education most of the mother were lower educated primary 30.18% and middle education 53.77% and least 7.54% were have higher education as graduate and above. Most 72.63% of the mother were belong to lower socio-economic status of Grade-IV and V and out of 106 mother ,69.81% mother were employed and 30.18% were of house wife,58.49% mother were of Primipara and 41.50% mother were of Multipara, and in the present study 97.16% Delivery conducted at hospital and only 2.83% were at home ,57.54% baby were male child and 42.45% baby were of female child , 68.86% mother belong to Joint family and only 31.13% were from Nuclear family. Similarly a study conducted by Burankar Vidhya, Naik D. [10] (2015) found that out of total 200 mothers who were interviewed, 105 (52.5%) were in the age group 25-29

years, followed by 50 (25%) between 20-24 years & 42 (21%) >30 years age. Only 24 (12%) mothers were working. 110 (55%) mothers were educated till secondary & higher secondary & 42 (21%) had completed graduation. 39 (19.5%) mothers were illiterate. Socioeconomic status majority of the mothers, i.e., 85 (42.5%) were in socioeconomic class III, followed by 73 (36.5%) in SE class IV & 33 (16.5%) in SE class II. Only 6 (3%) & 3 (1.5%) mothers were in SE class V & I respectively, All these finding were support the present study, Similarly Madhu K, ChowdaryS et al ^[1] 2009 found that the majority of the mothers were between the ages of 21 and 25 years old (60%) and 15 and 20 years old (30%). About 52% of the mothers were illiterate and belonged to a low to medium socio-economic class (55%). A majority of the mothers were primigravidae (65%) these finding also support the present study.

The present study reveals that majority 58.49% mother were initiate to breastfeed to her baby within 1-4 hours and only 1.88% were initiate breastfeed to her baby after 24 hours, Colostrum is given in only 61.32% children's, only 40.46% baby were exclusively breastfeed up-to six month, and prelacteal feed was given in 62.26% and not given in 37.73% children and supplementary feeding was initiated before six month in 50% children at the end of six-month 29.24% and after six-month in 20.75% children. Similarly a study conducted by Burankar Vidhya, Naik D. ^[10] found that 62 (31%) initiated breast feeding within one hour of delivery. 168 (84%) mothers gave colostrum to the baby. 42 (21%) mothers did exclusive breast feeding for six months. 115 (57.5%) mothers gave Prelacteal feeds. 96 (48%) mothers added supplementary feeding at 6 months of age. and A.K Srivastava, SS Keshari et al. ^[11] 2011 found that only 41.5% were initiate within one hours, 89% had initiate breastfeeding within 24 hours and 20% use prelacteal feed, 97% of children's were fed with colostrum.

Similarly Mamtarani, B. Divakar et al ^[12] 2012 was found that 537 (89.5%) mothers gave colostrum to their babies. Prelacteal feed was given by 205 (34.2%) of mothers All these finding were support the finding of present study. Similarly Madhu K, ChowdaryS et al ^[1] 2009 also. Our figures are more are less similar to National Family Health Survey-3 (NFHS) data (2005-2006) ^[13] which states that 60% newborns received pre-lacteal feed.

In the present study we found that association between various socio-demographic characters with breastfeeding characteristics, breast feeding initiated within one hours, colostrum given to her child, exclusive breastfeeding, not-given any prelacteal feed, and initiation of supplementary feeding at six month all these characters were most common in 20-24 years mother, and mother were belong to lower socio-economic status class III and IV, were of house-wife, belong to joint families, and have male child , and most importantly delivery conducted at hospital so they were properly counselled about all these good habit towards breastfeeding. Similarly a study conducted by Mamtarani1, B. Divakar et al ^[12] 2012 was found that Most of the mothers 537 (89.5%) gave colostrum to their babies. A greater proportion of mothers from high social class (Class II & III) were giving colostrum to their babies as compared to mothers from other class. A higher proportion of literate mothers 321 (92.5%) offered colostrum as compared to illiterate mothers 216 (85.4%), 31.3% of normally delivered babies received pre-lacteal feed and 43.8% babies delivered by caesarean section had received prelacteal feeds. Considering literacy status of mothers, 42.4 % of illiterate mothers had given pre-lacteal feed to their babies as compared to 28.2 % literate mothers.

CONCLUSIONS AND RECOMMENDATION

We concluded that the most of the mothers initiate breast feeding to her child was after 1 hours and within 4 hours, colostrum given pattern to child was increase but still not good we need to focus on that practices, exclusive breast feeding rate were still more back to their target and supplementary feeding need to improve, so we need to focus on all these point by IEC or BCC activities and improve all these indicator responsible for child malnutrition.

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