

# Study on Breastfeeding Practices Among Mothers in a Tertiary Care Hospital in Udaipur, Rajasthan

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## ABSTRACT

**Background:** Breastfeeding is the first fundamental right of the child. Positive impact of the breastfeeding on the health and development of the child has been documented in many of the research studies. Human breast milk is a nature's perfect gift, superior to anything available for child food. Breastfeeding is the least expensive, all time available and healthiest food of the child which reduces the morbidity and mortality of child. Breastfeeding improves maternal health, reduces the risk of ovarian and breast cancer. **Objectives:** a) To study the breastfeeding practices among mothers having, a child less than two years. b) To know the socio-demographic factor among study subjects. **Materials and methods:** A cross-sectional purposive study was conducted in the pediatric outpatient department of Geetanjali Medical College and Hospital, Udaipur. A total of 300 nursing mothers having child up to two years of age were included in this study. A predesigned questionnaire was used to collect information from the mother on the socio-demographic factor and breastfeeding practices. **Study period:** July 2014 to December 2014, over a period of six months. **Results:** Age of selected mothers ranged between 18 – 35 years of age, (24.33%) were illiterate, (72.67%) Hindu and (54.67%) belonged to the joint family. In socio-economic status (35.0%) mothers were from class V. Only (22.0%) mothers initiated breastfeeding within one hour, exclusive breastfeeding for four to six months was observed in (65.67%), for six to twelve months (20.0%), and duration of breastfeeding for more than twelve months (49.0%). **Conclusion:** The study revealed that initiation and duration of breastfeeding were observed to less extent with a good magnitude of exclusive breastfeeding, but still there is a need to educate mothers by programmes of interventions of ideal breastfeeding practices during antenatal and postnatal check-ups with social mobilization campaign. **KEYWORDS:** Exclusive breastfeeding, Children, Maternal health

## INTRODUCTION

Breast milk is the first safe and complete food which a baby gets from mother. The infant gets the energy and essential nutrients from the breast milk to survive during initial days of life for proper growth and development. Breast milk protects against diarrhoeal diseases and respiratory infections. It also promotes a bonding between mother and baby. Nature has created a way of breastfeeding to nurture a baby properly, mother is also confident that she has contributed a lot for sense of security and the health. Exclusive breastfeeding and longer duration of breastfeeding is known to protect the child by enhancing the development of brain, learning readiness and to reduce the risk of obesity. Breastfeeding is one of the most important determinants of child survival, birth spacing and prevention of infections. The nutritional and health status of infants mainly depends upon breastfeeding practices. A properly breastfed child is less likely to die or become ill, especially when exclusive breastfeeding is practiced for 4 - 6 months in developing country like India.

The beneficial effects of breastfeeding depend on breastfeeding initiation, exclusively on breast milk for four to six months of age with weaning and appropriate complementary food started. Breastfeeding practices are influenced by socio-economic factors, cultural background, and psychological status of mother, religious values, and literacy rate.

The NFHS-3 data of India shows that 21.5% of children were breastfed within one hour of birth, 48.3% were exclusively breastfed till five months. The practice of breastfeeding among Indian mothers is almost universal, but initiation of breastfeeding is quite late, and the colostrum is usually discarded. Only 35% of infants in the world are exclusively breastfed during the 1<sup>st</sup> 4 months of life, and complementary feeding begins either too early or too late with foods, which are often nutritionally inadequate and unsafe. Poor breastfeeding practices in initial period of life of a child may result in, malnutrition, poor physical and mental development with reduced productivity in future. Therefore, the present study was carried out to assess the pattern of breast

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feeding practices in the mothers who had delivered in the last two year.

## OBJECTIVES

- To study the breastfeeding practices among mothers having child up to two years of age.
- To know the socio-demographic factor among study subjects.

## MATERIALS AND METHODS

A cross-sectional study was conducted on 300 nursing mothers having children up to two year of age, attending the outpatient pediatric department of Geetanjali Medical College and Hospital, Udaipur. An orally expressed consent was taken from each of participant by purposively sampling method, selected over a period of 6 months. A predesigned questionnaire was used to collect information from the mother on the socio-demographic factor (age, religion, type of family, education and socio-economic status), and breastfeeding practices.

## RESULTS

Out of 300 participating mothers, 170 (56.67%) were from the urban area and rest 130 (43.33%) rural. Majority 131 (43.67%) were observed in the age group 18 to 23 years and minimum 42 (14.0%) in the age group 30 to 35 years. The rural mothers 69 (53.08%) were maximum in the age group 18 to 23 while the urban 79 (46.47%) were in the age group 24 to 29 years. Majority 218 (72.67%) of the subjects belonged to Hindu religion, and majority were from joint family 164 (54.67%). The majority of mothers of the rural area were illiterates 53 (40.77%) while urban mothers were educated up to primary 62 (36.47%). Maximum of the mothers 105 (35.0%) belonged to class-V, followed by class IV (25.33%) and class III (19.0%). (Table 1)

In our study, only 66 (22.0%) of the mothers had initiated breastfeeding within one hour against 46 (15.33%) who initiated after 12 hours of delivery. (Table 2)

In urban 139 (81.77%) and in rural 118 (90.77%) respondents were exclusively breastfed for four to twelve months of age. (Table 3)

Breastfeeding was extended for more than twelve months by 147 (49.0%) mothers. The duration of breastfeeding for less than six months was observed in 26 (15.29%) of urban and 17 (13.08%) of rural mothers. (Table 4)

## DISCUSSION

In the present study most of the mothers (72.67%) were Hindu, similar findings were observed (73.9%) by Mahmood et al.<sup>1</sup> and (96.2 %) by D. K. Taneja<sup>2</sup>. In this study (54.67%) participants were from joint family, (62.31%) of rural and (48.82%) urban mothers belonged to joint family. This is comparable with D. K. Taneja<sup>2</sup> where (56.47%) of mothers were from joint families. The higher percentage of the rural joint family is due to custom of married couples usually live with their parents. In our study (40.77%) rural mothers were illiterate,

Socio-demographic factor	Urban (n=170)		Rural (n=130)		Total (n=300)		Statistical test
	No	%	No	%	No	%	
<b>Age in years</b>							
18-23	62	42.35	69	53.08	131	43.67	$\chi^2 = 8.86$ , $p < 0.02$ , $df = 2$ Significant
24-29	79	46.47	48	36.92	127	42.33	
30-35	29	11.18	13	10.0	42	14.0	
<b>Religion</b>							
Hindu	122	71.76	96	73.84	218	72.67	$\chi^2 = 17.58$ , $p < 0.001$ , $df = 3$ Significant
Muslim	30	17.64	7	5.39	37	12.33	
Jain	10	5.89	22	16.92	32	10.67	
Others	8	4.71	5	3.85	13	4.33	
<b>Type of family</b>							
Nuclear	87	51.18	49	37.69	136	45.33	$\chi^2 = 5.39$ , $p < 0.025$ , $df = 1$ , Significant
Joint	83	48.82	81	62.31	164	54.67	
<b>Literacy status</b>							
Illiterate	20	11.76	53	40.77	73	24.33	$\chi^2 = 38.17$ , $p < 0.0005$ , $df = 4$ Significant
Primary	62	36.47	43	33.08	105	35.0	
Secondary	58	34.13	21	16.16	79	26.33	
Higher secondary	20	11.76	10	7.69	30	10.0	
Graduate & above	10	5.88	3	2.30	13	4.34	
<b>Socio-economic status</b>							
Class I	9	5.29	3	2.30	12	4.0	$\chi^2 = 7.96$ , $p < 0.01$ , $df = 4$ Not significant
Class II	33	19.41	17	13.07	50	16.67	
Class III	36	21.18	21	16.16	57	19.0	
Class IV	42	24.70	34	26.16	76	25.33	
Class V	50	29.42	55	42.31	105	35.0	

Table1: Socio-demographic profile of mothers

Practice starting breast feeding	Urban (n=170)		Rural (n=130)		Total (n=300)		Statistical test
	No	%	No	%	No	%	
< 1 hour	35	20.59	31	24.85	66	22.0	$\chi^2 = 1.25$ , $p > 0.50$ , $df = 3$ , Not significant
1-6 hour	61	35.88	49	36.69	110	36.67	
6-12 hour	47	27.65	31	23.85	78	26.00	
> 12 hour	27	15.88	19	14.61	46	15.33	

Table2: Distribution of mothers according to time of initiation of breastfeeding.

Period	Urban (n=170)		Rural (n=130)		Total (n=300)		Statistical test
	No	%	No	%	No	%	
< 4 months	31	18.23	12	9.23	43	14.33	$\chi^2 = 19.67$ , $p < 0.001$ , $df = 2$ , Significant
4-6 months	119	70.00	78	60.00	197	65.67	
6-12 months	20	11.77	40	30.77	60	20.00	

Table3: Distribution of mothers according to period of exclusive breastfeeding

Period	Urban (n=170)		Rural (n=130)		Total (n=300)		Statistical test
	No	%	No	%	No	%	
< 6 months	26	15.29	17	13.08	43	14.33	$\chi^2=8.66$ , $p < 0.02$ , $df=2$ , Significant
6-12 months	73	42.95	37	28.46	110	36.67	
>12 months	71	41.76	76	58.46	147	49.00	

Table 4: Distribution of mothers according to duration of breastfeeding similar findings (33.99%) were observed by Wadde S K et al.<sup>3</sup>

Out of 300 mothers (35.0%) belonged to class V and the majority (42.31%) were observed in rural and only (4.0%) in class I, socio-economic status. Similar findings to our study of the class I (3.59%) and class V (17.97%) was observed by Wadde S K et al.<sup>3</sup>, and M C Yadavannavar et al.<sup>4</sup> observed only (12.9%) in class V. In our study (29.42%) mothers belonged to urban class V, similar to (33.3%) by Vandana H et al.<sup>5</sup>

WHO recommends initiation of breastfeeding within one hour of delivery and exclusive breast fed for six month and longer for achieving the Millennium Development Goal 4, reduction of under-five child mortality 13 to 20% worldwide and MGD 5, reduction of ovarian and breast cancer and diabetes. This is attributed to colostrum, an anti-infective valuable human breast nutrient which provides immunity against infections.

According to the GOI data of National Family Health Survey-III, 6 the percentage of children who were breastfed within 1 hour of birth in rural India is (21.5%). In our study the results are higher, that is urban (20.59%) and in rural (24.84%). The national average<sup>7</sup> of mothers who have initiated breastfeeding within 1 hour after the birth is (23.4%) very close to our study (22.0%). M C Yadavannavar et al.<sup>4</sup> observed (23.3%) mothers had early initiation of breast feeding. Tiwari V et al.<sup>8</sup> reported that the early initiation of breastfeeding ranged from (16.0%) to (54.5%), in various parts of country.

In this study mothers initiated breastfeeding (84.67%) within 12 hours of delivery, (84.22%) in urban and (85.39%) in rural which is much higher compared to the (37.1%) reported at the national level<sup>9</sup> and (60.0%) by Banapurmath et al.<sup>10</sup> Mothers (15.33%) in our study did not breastfeed their babies till 12 hours. Our findings are compatible with (19.0%) reported by Madhu et al.<sup>(2009)</sup>.<sup>11</sup>

Exclusive breastfeeding for a period of 4 to 6 months of age is beneficial to infant survival, timely oxytocin secretion for uterine contraction and for the initiation of the breast milk reflex. This is needed to achieve optimum growth and good health of the child. Breastfeeding practices of early initiation, duration, and exclusive breastfeeding collectively have a long term effect on the physical and mental growth of the child.

In our study the percentage of mothers who had exclusively breastfed for 4 to 6 months were (65.67%), which is higher than the (46.0%) at national level<sup>9</sup>, but nearly similar (70.2%) by study of Kulkarni et al.<sup>12</sup> and (60.0%) by Banapurmath et al.<sup>10</sup> The exclusive breastfeeding for four to six months was observed in the urban (28.33%) by Roy S. et al.<sup>13</sup> not comparable to our findings (70.0%) of urban mothers.

In our study majority of the mothers (49.0%) breastfed their babies for more than 12 months, followed by (36.67%) for 6-12 months and (14.33%) for less than 6 months of duration. Similar findings were observed by M C Yadavannavar et al.<sup>4</sup> (58.06%), (26.61%) and (15.32%) respectively, and study by Anantha L et al.<sup>14</sup> observed (67.4%) of mothers who breastfed for more than 12 months and (32.6%) for 6-12 months.

## CONCLUSION

The study highlighted that only (22.0%) of mothers initiated breastfeeding within one hour of delivery, exclusively breastfeeding (65.67%) for period of 4 to 6 months and the duration of breastfeeding for more than twelve months of duration was observed (49.0%). The recommendation of breastfeeding practices by WHO are still not achieved. Nursing mothers need to be educated for ideal breast feeding practices through the campaign of mass social mobilization, and motivation during antenatal and post-natal health check-ups. The health care providers should also emphasize the need and benefits of ideal breastfeeding practices to nursing mothers.

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