

An Assessment on Breastfeeding and Weaning Practices in Odisha, India

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Abstract The World Health Organization recommends the practice of exclusive breastfeeding of infants for the first 6 months after birth. Breastfeeding, the simplest, healthiest and least expensive feeding method that fulfills the infant's needs for nutrition and growth and it also reduces child morbidity and mortality. Although breastfeeding is a common practice in India, several factors like some cultural beliefs and misconceptions etc. affect poor breast feeding practices. Most of the people do not properly understand the importance of the knowledge about breastfeeding how it should be given, the timings, duration, correct techniques and appropriate time of weaning mother's milk. The study was taken up to assess the knowledge, attitude and actual practices of breastfeeding in the mothers of children less than 2 years of age who attended the Immunization clinic. This was a Observational (Cross-sectional) study at Immunization clinic of Hi-Tech Medical College & Hospital, Bhubaneswar, Odisha for 3 months period. 286 mothers who visited the immunization clinic whose children were less than 2 years of age were part of the cohort. Predesigned and pretested questionnaire were used to interview the mothers. The data were analyzed in percentile. Knowledge of initiation of breastfeeding within half an hour to one hour of birth was there in 52.78% mothers And 40% had an idea about the importance of colostrum. The meaning of Exclusive breastfeeding was known to 34.97% while almost 48% mothers initiated breastfeeding within half an hour of birth, 75% fed colostrum to their newborns, 61% were practicing exclusive breastfeeding for first 6 months and 90% were practicing night feeds. Inappropriate attachment and positioning was observed in 55% of mothers. Only 15% started weaning (supplementary feeding) after 6 months of baby's age. To give prelacteal feeds, non initiation of breastfeeding soon after birth, giving supplementary foods (Weaning) earlier and avoid exclusive breastfeeding are some of the cultural practices still prevalent in many areas and societies. The study showed that the mothers lacked knowledge regarding breastfeeding practices which could be imparted early during antenatal visits to the mothers and their spouses for support, sensitizing the health care givers and improving infrastructure for a successful breastfeeding initiation.

Keywords: Exclusive Breastfeeding, Colostrum, Supplementary Feeding, India.

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1. Introduction

The mothers milk is the best gift nature has provided. It is complete nourishment for babies. At the time of breast feeding, the child can be close to the mother while having feed.

Exclusive breastfeeding means feeding the infant, only mother's milk and no other liquid or solid food except any medicine and vitamin/mineral as supplement.

The World Health Organization recommends the practice of exclusive breastfeeding of infants for the first 6 months after birth and to continue breastfeeding with supplementary diet up to two years or more [1].

Initiation of breastfeeding within one hour of birth, practicing exclusive breastfeeding for 6 months is the simplest, healthiest and least expensive feeding method that fulfills the infant's needs for nutrition and growth and it also reduces child morbidity and mortality.

For child survival mother's milk is one of the most important determinants besides breast feeding helps in inter birth spacing and prevention of childhood infections [2]. Breast milk provides nutritive and immunological protection in infants to ensure health and survival. It is known to prevent adult onset disease like coronary artery disease, diabetes and hypertension [3].

During in the first six months of a child's life, only mother's milk (exclusive breast feeding) can reduce under-five mortality by 13% in developing countries as estimated by the United Nations Children's Fund (UNICEF) [4].

Malnutrition causes 35 % of disease burden on children under the age of five. In fact, the best practices in the areas of breastfeeding and complementary feeding are important degree with the ability to save the lives of 1.5 million children under the age of five every year [5].

Globally less than 40% of infants under the age of six months are exclusively breastfed [6].

Although breastfeeding is a common practice in India, but there are influences of some cultural beliefs resulting in unsafe practices like prelacteal feeds (e.g. ghee, honey) and discarding colostrum etc. which affects the newborn's health. Besides cultural beliefs, several factors like maternal employment outside home, gender equity, lack of knowledge on breast feeding, social pressures and illness among the lactating mothers, easy availability of infant milk formulae and aggressive marketing by the commercial preparations etc. have an impact on lactating mother's psyche.

Though the ideal time to educate the women about the merits of breast feeding, is pre-pregnancy or during antenatal period, few receive counseling during pregnancy and most of them after failed lactation [7].

With this background a KAP study was conducted on the knowledge about breastfeeding, breastfeeding practice, i.e. timings of breastfeeding, appropriate techniques and proper time of initiation of supplementary food.

2. Objective

The aim of the study was to assess the knowledge, attitude and actual practices of breastfeeding among the mothers of children less than 2 years of age who attended the Immunization Clinic of Hi-Tech Medical College & Hospital, Bhubaneswar, Odisha, India.

3. Materials & Methods

This cross sectional study was carried out at the Immunization OPD (Clinic) of Hi-Tech Medical College & Hospital, Pandara, Bhubaneswar from 1st July 2014 to 30th September 2014 over a period of 3 months. Total 286 mothers having children's aged less than two years of age, who attended the immunization clinic for child vaccination were interviewed. The data regarding participant's demography and practices towards breast feeding were collected from the mothers on pre-designed and pre-tested questionnaire which is used in the hospital. A verbal consent was taken from the respondent before collecting the information. Prior permission to conduct the study was obtained from the institutional ethical committee.

4. Results

Two hundred and eighty six mothers were interviewed during the study. Most (97.2%) of the mother's age ranged between 18-35 years. Majority of them (190 i.e. 66.4%) were between age group 21-30 years and 270 (94.40%) were Hindu.

59.1% of the mothers belong to joint family. Majority 102 (35.66%) had education up to secondary level where as only 34 (11.89%) were illiterate. Majority (42.66%) of the mothers belong to family with monthly income between Rupees. 11,000 to Rupees. 20,000.

Table 1. Socio-Demographic Profile of Mothers

Demographic Factors	Nos. n =	Percentage = 100*n/N
Age of Mother(yr)		
18-20	50	17.5
21-25	101	35.3
26-30	89	31.1
31-35	38	13.3
above 35	8	2.80
Religion		
Hindu	270	94.40
Muslim	9	3.15
Others	7	2.45
Type of Family		
Nuclear	117	40.9
Joint	169	59.1
Literacy Status		
Illiterate	34	11.89
Primary (Class 4)	16	5.59
Secondary (Class 10)	102	35.66
Higher Secondary (Class 10+2)	70	24.48
Graduate & Above	64	22.38
Monthly Family Income (in INR)		
5K-10K	83	29.02
11K-20K	122	42.66
21K-30K	48	16.78
>30K	33	11.54

Biological characteristics (age, gender) of the children are as per Table 2. Almost 93% deliveries were made at institutions. Amongst the study subjects, 167 (58.39%) mothers were having their first child.

Table 2. Profile of Children and Place of Delivery

Variable	Nos. (n)=	Percentage = 100*n/N(=286)
Child Gender		
Male	151	52.80
Female	135	47.20
No. of Child		
1 st	167	58.39
2 nd	81	28.32
3 rd	38	13.29
Age of Child		
0 - 6 Months	162	56.64
6 - 12 Months	87	30.42
12 - 24 Months	37	12.94
Place of Delivery		
Institutional	265	92.65
Home	21	7.35

Table 3. Mother's Knowledge About Breastfeeding

Sl. No	Knowledge	Mothers having Idea	
		Nos.	%
1.	Have to breastfeed	286	100%
2.	Initiation of breast feeding within 0.5-1 hr of birth	151	52.78%
3.	Importance of Colostrum feeding	115	40.21%
4.	Exclusive breastfeeding	100	34.97%
5.	Importance of night feed	119	41.60%
6.	To feed one side at a time	141	49.30%
7.	Continue breastfeed up to 2 years of age	171	59.79%
8.	Weaning to start after 6 months	160	55.94%
9.	Proper Breastfeeding technique	128	44.76%

Knowledge of breastfeeding amongst mothers was also seen. Results are as per Table 3.

Breastfeeding and supplementary feeding practices of mothers were also seen and results are as per Table 4 and Table 5.

Table 4. Breastfeeding Practices

Variable	Nos. (n)=	Percentage = 100*n/N(=286)
Colostrum Given or Not		
Yes	214	74.83
No	72	25.17
Initiation of Breastfeeding		
< 0.5 Hr	137	47.91
0.5 - 1 Hr.	64	22.38
1 - 6 Hrs.	26	9.09
7 - 12 Hrs.	22	7.69
13 - 24 Hrs.	16	5.59
>24 Hrs.	21	7.34
6 Months Exclusive Breastfeeding		
Practiced	174	60.84
Not Practiced	112	39.16
Proper Breast Feeding Practiced		
	115	40.21
Night Feeding Practiced		
	258	90.21

Table 5. Supplementary Feeding Practices;

Variable	Nos. (n)=	Percentage = 100*n/N(=158)
Supplementary feeding started At (N=158)		
< 4 Months	61	38.61
4 - 6 Months	72	45.57
>6 Months	25	15.82
Type of Food		
Bought Out Food	121	76.58
Home Made Food	37	23.42
Breastfeeding continued after initiation of Supplementary feeding	29	18.35

Amongst bought out supplementary foods were readily available products e.g. brand names like Nestum and Lactogen were in dominance.

5. Discussions

Breastfeeding knowledge of the participants was assessed and 100% mothers had the knowledge of breastfeeding the infants. However, only 70.29 % mother initiated breastfeeding within 1 hr. of baby birth. According to IYCF (2004) guidelines [8], As per Government of India recommendation, immediately after birth breastfeeding should be initiated, preferably within one hour. In contrast to our findings, breastfeeding within 1 hr & 24 hr was lower in study by Kumar et al [9] and Chatterjee et al [10] where breastfeeding within 1 hour was only 6.3% & 14.54% and 32.6% within 24 hours and 23.3% as reported by Yadavannavar et al [11]. These differences may be due to the timings when study was conducted, regional differences and place of delivery, which in our case was 92.65% at institutions.

In the present study 40.21% of mother had knowledge on the importance of colostrum feeding, which is lower comparable to others studies in India of Maheshwari et al [12]. and Tiwari et al [13]. where the importance of colostrum was known to 58% and 90% of the mothers respectively. Nigam et al [14]. found that knowledge about benefits among mothers was scarce, only 17% were aware of anti-infective properties while the knowledge regarding nutrition was 60%. In the study by Oche et al.

[15], colostrum was not used as it was thought to be impure by 47% women.

In our study only 74.8% of the mothers gave colostrum which is close to 81.6% colostrum acceptance reported by Parmer et al [16] and much higher than 35% as per study by Sanjay et al [17].

As per the study of Pathi and Das in Orissa [18] only 8.6% mothers practiced EBF whereas, according to a study by Benjamin et al (1993) at Punjab [19] and Aggarwal et al at Delhi [20], it was 57.7% & 63.50% respectively. In this study 60.8% had practiced exclusive breastfeeding though 34.9% mothers had knowledge of exclusive breastfeeding till 6 months of baby's age. Guidelines from delivery institutions, Pediatricians advices, moderates literacy levels of mothers attributed to good EBF practice.

Proper breastfeeding technique was known to 44.7% mothers. Although mother's knowledge on breastfeeding was less, the practices observed were better in proper feeding practice and night feeding (90.2%).

Supplementary feeding was started below 4 months of infants by 38.6% mothers. Only 15.8% mothers had initiated supplementary feeding in infants above 6 months. Our results are almost similar to the results obtained by Sharma M and Sharma S in their study in rural area, where 75% of mothers initiated weaning in babies below 6 months of age [21].

Immediately after starting supplementary feeding, 81.65% mothers stopped breastfeeding. Home made food was given to only 23.42% babies as supplementary food. The observations were alarming in case of start of supplementary feeding and discontinuation of breastfeeding after supplementary feeding started.

It was also noticed that 76.58% of mothers were lean towards commercial baby food products. Literacy had little effect on knowledge of breastfeeding amongst mothers.

6. Conclusion

It is the universally accepted that breastfeeding is the best infant feed with benefits the infant and the mother. Being economical, it is beneficial for the developing countries, particularly amongst the lower socioeconomic groups. Some cultural practices like giving prelacteal feeds, giving breastfeeding late after birth, starting supplementary foods early and avoiding exclusive breastfeeding have definitive impact on many mothers. The study shows that the mothers lacked knowledge regarding breastfeeding practices. There is a need for health education program aimed at educating mothers on:

1. Initiation of breast feeding within ½ -1 hr after birth.
2. Exclusive breast feeding till 6 months of age.
3. Importance of night feed and colostrum.
4. Continue breast feeding till 2 years.
5. Feed completely on one side at a time.
6. Support for proper attachment and positioning.

Obstetricians are likely to have more influence on breastfeeding initiation and Pediatricians on breastfeeding durations.

Training programs regarding breastfeeding should be developed for the implementation in obstetric and pediatric residents and also nursing staffs. Strengthening of information, education & counseling for antenatal women with active involvement of Accredited Social Health activist (ASHA)/ Anganwadi Workers (AWW)/ Auxiliary Nurse Midwives (ANM) regarding timely initiation of breastfeeding following delivery, duration of exclusive breastfeeding, and importance of feeding colostrum.

This study highlights the need to educate mothers regarding breastfeeding during antenatal visits, including the spouses for support, as the mother is more receptive during her pregnancy and has good interaction with the health care provider. Routine examination of the mother including examination of the breasts for inverted nipples, flattened nipples followed by breastfeeding counselling and improvement in infrastructure will lead to a successful breastfeeding initiation.

Future KAP study on knowledge and practice of mothers on breastfeeding in a large population based cohort at community level will open up appropriate base line data.

Declaration of Conflicting Interests

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