

BREAST FEEDING PRACTICES AMONGST CHILDREN IN SLUMS OF DIBRUGARH TOWN OF ASSAM: COMMUNITY BASED CROSS SECTIONAL STUDY

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ABSTRACT

BACKGROUND

After birth the health of the baby depends upon the nurturing practice adopted by the family. The low prevalence and duration of exclusive and partial breastfeeding increase the risk of infant and childhood morbidity and mortality.

OBJECTIVE

To assess the Breast Feeding Practices amongst mothers having 12-24 months children in slums of Dibrugarh town, Assam.

MATERIALS AND METHODS

A community based, cross-sectional study was conducted for a period of 6 months, from January 2014 to June 2014 amongst 12-24 months aged children residing in slums of Dibrugarh town, Assam. 177 children were calculated for the study by standard sampling method. An interview with the help of a pre-designed pre-tested proforma was conducted by house to house survey.

STATISTICAL ANALYSIS

Statistical analysis was done using MS Excel 2007 and presented as percentages.

RESULTS

Majority (50%) of children belonged to upper-lower socio-economic status (IV). 65% lived in nuclear family and 35% lived in joint family. 53.13% of children were in the age group of 12-17 months and 46.88% in 18-24 months. 51.25% were male and 48.75% were females. Majority (40%) were first birth order. 85.62% had institutional delivery, of which 42.5% was delivered at tertiary level hospital. In 31.88% children breast feeding was initiated within 1 hr of birth. Colostrum was given to 63.75% of children. 35% were given pre lacteal feed. 65% had exclusive breast feeding for 6 months. Among 35% who were not exclusively breast fed, inadequate milk production (28.57%), illness of child (33.9%) and illness of mother (37.5%) were the main reasons.

CONCLUSION

Efforts to be taken to improve the practice of mothers regarding avoidance of prelacteal feeding and implementing exclusive breast feeding.

KEYWORDS

Colostrum, Prelacteal Feeding, Exclusive Breast Feeding.

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INTRODUCTION

After birth the health of the baby depends upon the nurturing practice adopted by the family. The ideal food for the young infant is human milk which is species specific and has been conceived by nature for the human infants. It has specific characteristics that match the growing infants' nutritional requirements.¹⁻² Breastfeeding has been conclusively demonstrated as one of the important determinants for comprehensive growth and development of infants, more so among low birth weight infants.³

The United Nations Children's Fund (UNICEF) has estimated that exclusive breastfeeding in the first six months of life can reduce under-five mortality rates in developing countries by 13%.⁴ WHO and UNICEF jointly developed the Global Strategy for Infant and Young Child Feeding whose aim is to improve - through optimal feeding - the nutritional status, growth and development, health, and thus the very survival of infants and young children.⁵ Two major areas of activity in support of breastfeeding were initiated within the past twenty years: The International Code of Marketing of Breastmilk Substitutes in the 1980s, and The Baby-friendly Hospital Initiative, including Step 10 in the community, in the 1990s.⁶

Exclusive breastfeeding should be practiced from birth till end of six months (180 days). This means that no other food or fluids should be given to the infant below six months of age unless medically indicated. After completion of six months, with introduction of optimal complementary feeding,

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breast feeding should be continued for a minimum for 2 yrs. and beyond depending on the choice of mother and the baby. Even during the second year of life, the frequency of breastfeeding should be 4-6 times in 24 hours, including night feeds.⁷ the antenatal mother has to be motivated and prepared for breastfeeding.

In the last trimester of pregnancy, breast and nipple should be examined for retracted and cracked nipples and correction should be done accordingly.⁸ globally, slums have been recognized as neglected communities with limited access to health services. These settings are compounded by inhabitation by migratory population living under stressful conditions. In India, there has been an alarming increase in the slum population where the most deprived urban population live.⁹ Although breastfeeding is nearly universal in India, only 46 percent of children under 6 months are exclusively breastfed.¹⁰ Based on the above situation the present study was carried out in urban slum.

OBJECTIVE

To assess the Breast Feeding Practices amongst mothers having 12-24 months children in slums of Dibrugarh town, Assam.

MATERIALS AND METHODS

The present study was undertaken to assess the breast feeding practices of the mothers having 12-23 months children in the slums of Dibrugarh Town. There are 10 registered slums of Dibrugarh town. Most of the slum dwellers are daily wage labourers and majority of them are migrant population. The study was carried out for 6 months from January 2014 to June 2014. All children in the age group of 12-23 months and their mothers residing in the study area were considered as Study Universe.

Study Design

Community based cross-sectional study.

Sample Size

Was calculated to be 177 using standard formula.

Sampling Design

Out of 10 slums of Dibrugarh town, 5 were selected by simple random sampling. Then the children of 12-23 months were enumerated and listed with the help Anganwadi and ASHA worker. Children to be selected from each slum are determined by proportionate allocation and data was collected by house to house visit till the required sample in each slum area was obtained. Data were collected using pre-designed, pre-tested Schedule. The respondent was the mother of the child. Informed written consent was taken from the mother.

Statistical Analysis

Done using Microsoft Office Excel 2007 and presented as percentages.

Inclusion Criteria

All children aged 12 months to 23 months and their mothers were included.

Exclusion Criteria

1. Mothers of the children who did not give consent were excluded.
2. In case of death of mother or absence of mother at home were excluded.
3. Mothers having very sick children.

RESULTS

Out of 177 children, mothers of 160 children gave consent to participate in the study. Response rate was 90.39%. Out of the study subjects 53.13% children belonged to the age group of 12-17 months and 46.88% belonged to 18-23 months age group. 51.25% children were males and 48.75% were females. Majority (50%) of the children belonged to upper-lower socioeconomic group. 33.13% mothers belonged to the 15-19 years age group. 18.75% were illiterate. All the mothers were unemployed. 37.5% mothers were married in their teenage period (Table 1). Majority (40%) of children infants belonged to first order. 42.5% mothers delivered in tertiary level hospital while 14.38% delivered at home. 36.25% mothers had delivered by caesarean section (Table 2). 31.88% children were initiated breastfeeding within one hour of birth and 25.63% were initiated breast feeding after 24 hours. 63.75% children received colostrum. 35% received prelacteal feed.

Out of 160 children, 65% were exclusively breastfed for six months. Of the 35% children who were not exclusively breastfed, 28.57% cases were due to inadequate milk production, 37.5% was due to the illness of the mother and 33.9% was due to the illness of the child. 47.5% were breastfed for less than 8 times per day. 68.75% children were breastfed for as long as the baby sucked, 17.5% for less than 15 minutes and 13.75% for more than 15 minutes. 21.88% children received breast milk from a single breast in a single episode, 46.25% received breast milk from both the breast in a single episode without completing from one breast and 31.88% received from both the breasts in a single episode after completing from one breast. Good attachment while feeding their children was seen in 46.25%. While position of breast feeding assessed, poor positioning was seen in 45% children (Table 4).

Baseline Parameters of Children	No. of Children (N = 160)	Percentage
Type of Family		
Nuclear	104	65.00
Joint	56	35.00
Religion		
Hindu	126	78.75
Muslim	34	21.25
Age (in months)		
12-17	85	53.13
18-23	75	46.88
Sex		
Male	82	51.25
Female	78	48.75
Socio-Economic Status		
Upper-Middle(II)	20	12.50
Lower-Middle(III)	45	28.13
Upper-Lower(IV)	80	50.00
Lower(V)	15	9.38
Education of Mothers		
High School Certificate	23	14.38
Middle School Certificate	32	20.00
Primary School Certificate	75	46.88
Illiterate	30	18.75
Age at Marriage of Mothers		
15 -19	60	37.50
20 - 24	57	35.63
25 - 29	23	14.38
30 - 35	20	12.50
Age of the Mothers		
15 -19	53	33.13
20 - 24	58	36.25
25 - 29	26	16.25
30 - 35	23	14.38

Table 1: Socio -demographic profile of children

Birth Order	No. (160)	Percentage
First	64	40.00
Second	51	31.88
Third	28	17.50
Others	17	10.63
Place of Delivery		
Tertiary level Hospital	68	42.50
State Health Dispensary	25	15.63
At Home	23	14.38
Private Nursing Home	44	27.50
Mode of Delivery		
Normal	102	63.75
caesarian	58	36.25

Table 2: Distribution of children according to their birth history

Parameters	No. (Total 160)	Percentage
Breast Feeding Initiation within		
<1 Hour	51	31.88
1-4 Hours	29	18.13
4 - 24 Hours	39	24.38
>24 Hours	41	25.63
Prelacteal Feeds		
Received	56	35.00
Not received	104	65.00
Colostrum		
Received	102	63.75
Not received	58	36.25
Exclusive Breastfed for 6 Months		
Yes	104	65.00
No	56	35.00
Duration of Breast feeding (in months)		
0-2	4	2.50
2-4	16	10.00
4-6	36	22.50
6 Completed	104	65.00
Reason of not Exclusively Fed		
Illness of mother	21	37.50
Illness of child	19	33.93
Inadequate milk production	16	28.57
Any difficulty in BF		
Yes	59	36.88
No	101	63.13
Milk Substitutes		
Infant Milk Formula	20	35.71
Animal Milk	22	39.29
Others	14	25.00
Frequency per day		
>8	84	52.50
<8	76	47.50
Duration of Breast Feeding per feed		
As long as baby sucked	110	68.75
<15 mins	28	17.50
>15 mins	22	13.75
Breast Feeding Habits of Mother		
From single Breast in a single episode	35	21.88
From both the Breast in single episode without completing from one Breast	74	46.25
From both the Breast in a single episode after completing from one Breast	51	31.88

Table 3: Breast feeding practices of mother

Attachment of Children	No. of Children (160)	Percentage
Good Attachment	74	46.25
Poor Attachment	86	53.75
Position of Children		
Good Positioning	88	55
Poor Positioning	72	45

Table 4: Distribution of the children according to their attachment and position of breast feeding

DISCUSSION

Early breastfeeding within one hour and exclusive breastfeeding for the first six months are the key interventions to achieve MDG 1 and MDG 4, which deal with reduction in child malnutrition and mortality, respectively. In a study conducted at rural community of Maharashtra, 57.84% of mothers delivered in hospital as compared to 42.15% delivered home.¹¹ In our study 85.62% had institutional delivery, and 14.38% was delivered at home. In a study conducted at Pondicherry, vaginal delivery and caesarean section were 70.3% and 29.7% respectively.¹² In the present study 63.75% mothers had normal delivery and 36.25% had caesarean section. Prasad K et al found initiation of breast feeding among 75.4% babies within 1 hour and 24.6% babies after 1 hour.¹²

In the present study 31.88% babies were initiated within 1 hour, 18.13% were initiated after 1 to 4 hour of birth, 24.38% were initiated 4- 24 hours and 25.63% were initiated breast feeding after 24 hours. Colostrum is rich in protein and immunoglobulin.¹² Feeding this is extremely important immunologically (Rich in antibodies and protective substances) nutritionally (To provide vitamins and minerals) and developmentally (To ensure maturation of intestinal mucosa). The prominent areas of concern is discarding of colostrum by 36.25% of mothers. In a study conducted in rural Northern India 40.1% mothers gave prelacteal feeding to their children.

In present study 35% received prelacteal feed. 40.1% mothers gave prelacteal feeding to their children.¹³ Arun Gupta and Y. P. Gupta showed that more than half the children (54%) in the age group of 0-3 months were exclusively breastfed whereas this percentage was much lower (26%) for children in the age group of 4-6 months.¹⁴ Prevalence of exclusive breast feeding for 4 months in a study conducted in rural community of Maharashtra was only 28.43%.¹¹ In the present study 10% were exclusively breastfed for 2 -4 months, 22% for 4-6 months and 65% for completed 6 month.

Out of this 35% infants who were not exclusively breastfed, 28.57% cases were due to inadequate milk production, 37.5% was due to the illness of the mother and 33.9% was due to the illness of the child. A study by R. Parmaret al. stated the various reasons for starting bottle feeding before six months, which were: insufficient milk (59.7%), working mother (13%), to habituate the baby to bottle (12%) maternal illness and child illness (6.5%).¹⁵ A study by Aggarwal et al. concluded that the most common reason for early food supplementation was insufficient breast milk (49.4%).¹⁶ Sucking should be continued as long as the baby desires to suck. This will satisfy the sucking instinct of the baby and will express the "hind milk" which is thicker and full of fat. The fore milk (at the start of breast feed) is thin and

contains less fat.^{2,8} This will satisfy only the thirst of the baby. In this study 46.25% received breast milk from both the breast in a single episode without completing from one breast which did not satisfy the required nutrient of the children.

CONCLUSION

Universal practice of early initiation of breast feeding within one hour of birth is necessary as a routine practice for all types of deliveries irrespective of health status of the mothers. Thus there is a need to educate the adolescent girls and mothers and train the health care workers including the ASHA, ANM about the advantages of establishing early breastfeeding, advantages of colostrum, exclusive breastfeeding, avoidance of harmful practices like prelacteal feeds and pacifiers.

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