

BREAST FEEDING PRACTICES AMONG CHILDREN SUFFERING FROM DIARRHEA UNDER 2 YEARS OF AGE, VISITING TERTIARY CARE HOSPITAL, KARACHI.

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Abstract:

Introduction: Exclusive breast feeding is the key strategy for the development and growth of a child. Inadequate, partial or complementary feeding practices in the initial six months may lead to detrimental effects on the health, amongst them diarrhea has been recognized as the major consequences of it. Diarrheal diseases accounts for approximately 1.34 million deaths globally and act as a second leading cause of mortality among children. The proposed study was undertaken to determine the breastfeeding practices among children less than 2 years of age suffering from diarrhea, seeking care at tertiary care Hospital of Karachi.

Methodology: A Cross sectional hospital based study was conducted and data were collected by using semi-structured questionnaire after taking consent from mothers. The study was conducted from 1st October to 5th November 2013. About 207 mothers were selected through Purposive sampling from all three pediatric units of Civil Hospital Karachi as well as pediatric emergency and pediatrics out-patient departments of Civil Hospital, Karachi. Results: Out of 207 patients, study results showed children breastfed within one hour after birth were 43.5% (90), within 6 hours were 19.3%(40), within 24 hours were 14.5%(30), after 24 hours were 19.3%(40) and patients who were not breastfed at all about were 3.4%(7). Patients who were exclusively breastfed up to 6 months were 36.2% (75) and about 58% (120) children were given pre-lacteal feed other breast milk.

Conclusion: This study concluded that awareness and knowledge regarding breastfeeding is appropriate among mothers and care givers but the practices of exclusive breastfeeding are not satisfactory.

Key words: breastfeeding, pre-lacteal feed, complementary feeding, vaccination, diarrhea.

Introduction:

Exclusive breastfeeding up to the age of 6 months is the fundamental right of every child. According to World Health Organization Exclusive breastfeeding is a practice in which the child has received only breast milk from his / her mother or a wet nurse, or expressed breast milk, and no other liquids or solids with the exception of drops of syrups consisting of vitamins, mineral supplements or medicine.[1]. Data from the developing countries reported that approximately 1.34 million children die prior to their second birthday due to diarrheal diseases and reported as the second leading cause of mortality among children less than 2 years of age.[2&3]. The preliminary two years of life are considered as most important years for the growth and development of child. Therefore exclusive breastfeeding for six months and continued breast feeding as well as adequate introduction of solid and liquid food subsequently is inevitable, Exclusive breastfeeding is acclaimed as a global health policy for children.[4], In some developing countries although breast feeding initiation rate is satisfactory but exclusive breastfeeding is less than 52.4% until the

age of 1 month. [5] The importance of breast-feeding may be highlighted by WHO's recommendation that infants be exclusively breast fed in initial six months of life, whereas practicing partial breastfeeding complemented with other foods up to the age of 2 years and above is acceptable.[6]. A meta-analysis of 2011, concluded that in contrast to exclusive breastfeeding, predominant, partial and no breastfeeding increase the risk of diarrheal associated morbidity and mortality in infants. [7]. A recent study from Bellagio, child survival study group which used results of several systemic reviews from low or middle income countries, proposed that exclusive breastfeeding for the first year of life can reduce the infant's mortality rate and promote breastfeeding as a key strategy of Child Survival Program. [8]. Unfortunately, in Pakistan practices of breastfeeding and predominantly exclusive breast feeding are sub optimal, in contrast to other countries of South Asia including India, Bangladesh, Nepal and Sri Lanka. [9]. In Pakistan approximately 740,000 childhood deaths are reported each year and out of these 53,000 are due to diarrhea alone [6]. Surveys for Child feeding practices from Pakistan reported similar initiation and continuation pattern for breastfeeding up to two years of age but local cultural practices like giving Honey or Ghutti as the first pre-lacteal feed contributes to low prevalence of exclusive breastfeeding. Feeding practices may have an important impact on diarrheal diseases in developing countries and mortality risk in children who are not exclusively breast fed is 14 times higher [7]. The current status of exclusive breastfeeding in Pakistan does not

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meet an overall satisfactory level. The WHO endorses that child should be breastfed shortly after birth. Moreover it is also included in the four top priority core indicators of child health. Early initiation rate of breast feeding is higher in Pakistan but it declines rapidly after 2 months of birth.[10] The aim of this study is to determine the breastfeeding practices among children suffering from diarrheal disease in infancy visiting tertiary care hospital of Karachi and highlight the importance of exclusive breastfeeding as the most useful preventive measure.

Methodology:

This is a cross sectional hospital based study conducted for the period of five weeks from 1st October to 5th November 2013 by using purposive sampling in the 3 Pediatric Units of Civil Hospital Karachi, Emergency and Out-Patient Department, Civil Hospital of Karachi Is the most renowned and biggest health care Institute of Karachi, the emergency department, OPD and pediatric wards of all three units collectively serve more than 500 children per week. All inpatient children in addition to patients coming to pediatric OPD and emergency with complaint

of diarrhea, of age group 0-2 years were included. Verbal consent was taken from caregivers. Data collected from each patient was recorded on a semi- structured questionnaire. Statistical analysis was performed using SPSS version 16.0 and mean, S.D, frequencies and percentages were calculated.

Results:

Table 1 shows that out of 207 children , 104 (51%) were females , mean age of the children was 18 months \pm 1.5 S.D. Nearly two- third of the patients were between 6 to 12 months of age. About 46.9 % of the children's birth weight was lying between 2.5 - 2.9 kg, the mean birth weight of the participants was 2.7 kg . Fifty nine (28.5%) mothers did not know the birth weight of their child. More than half of the mothers (52.7%) accompanying children were illiterate. Only two mothers (1%) had educational attainment up to the graduation level.

Table 1 Socio-demographic characteristics of the study population (N=207)

S. No.	Characteristics	Frequency N	Percentage (%)
1	AGE OF CHILD		
	Less than 6 months	36	17.4
	6-12 months	127	61.4
	13- 24 months	44	21.2
2	GENDER		
	Males	102	49
	Females	105	51
3	BIRTH WEIGHT		
	Less than 2.5 kg	41	19.8
	2.5- 2.9 kg	97	46.9
	3 kg or more	10	4.8
	Birth weight not known	59	28.5
4	MOTHER'S EDUCATION		
	Illiterate	109	52.7
	Primary	44	21.6
	Secondary and intermediate	52	25.1
	Graduate	2	1

Table 2 illustrates that about 120 (58%) of the patients were breastfed within first hour of birth, amongst 207 children, 7(3.4%) were never breastfed after birth, However only 75 (36.2%) were exclusively breastfed up to the age of six months. Nearly 58 % of the patients were given pre-lacteal feed other than breast milk, Honey was the most common choice as the first pre-lacteal feed. Only 36.2% patients were initiated weaning at the age of six months. Nearly half of the mothers (43%) preferred Cerelac (commercially prepared baby food) as the first complementary feed followed by the biscuits in 10 %.

Table 2 Feeding practices of the study participants (N=207)

S.No.	Characteristics	Frequency (n)	Percentages (%)
1.	Duration of exclusive breast feeding		
	Less than 6 months	82	39.72
	6 months	75	36.2
	More than 6 months	43	20.8
	Not breast fed at all	7	3.4
2.	Prelacteal feed given		
	Yes	120	58
	No	87	42
3.	Type of pre-lacteal feed		
	Honey	63	30.4
	Gutthi	38	18.4
	Other	19	9.17
4.	Initiation of complementary feed		
	<6 months	51	24.6
	6 months	74	35.7
	>6 months	82	39.6

Discussion:

The results of this present study concluded that overall status of exclusive breast feeding practices in Pakistan is disappointing. Therefore, improvement is desired. The situation of breastfeeding in Pakistan does not meet an overall satisfactory level. The WHO endorses that child should be breastfed shortly after birth [14]. Moreover the weaning practices are also poor, leading to devastating child health in Pakistan. However the early initiation rates are high in Pakistan. Pakistan has made negligible progress in exclusive breast feeding in last 7 years [15]. As reported in Demographic Health Survey, this fraction has ascended marginally that is 37.7 per cent in 2012-13 from 37.1 per cent in 2006-07. On the other hand the rate of bottle feeding has been increased to 41 per cent in 2012-13 from 32.1 per cent in 2006-07, reflecting a highly prevalent culture of bottle-feeding in Pakistan [16]. Moreover, despite the fact that above 90% women prefer to breastfeed their babies initially, this rate decreases to only 71% in the subsequent six months [17]. In this study most of the children were breastfed within 1 hour after

birth this might be due to awareness during hospital stay. Result indicated that majority children were initiated breast milk immediately after birth, unfortunately very few of them were continued for the duration of six months. Wide-ranging international research has documented numerous health benefits of breast feeding for children and at the same time provided evidence of decreasing risk from different respiratory and GI tract infection together with diabetes mellitus, lymphoma, and even Crohn disease [18]. Positive response of the benefits of breastfeeding in various researches was found to be associated with breastfeeding duration and reason for continued breast feeding till 6 months was capability of mother to mention at least one advantage of breastfeeding [19] which explains why the sustained breastfeeding in present study was low (62.8%) in proportion with high illiteracy of mothers (52.7%). Most of the patients belong to 6 to 24 months age, and hence were still being breastfed, followed by number of patients who were breastfed for duration varying between 18 to 24 months which is in line with an old Pakistani study [20] Moreover, majority of

the patients were given other types of pre lacteal feeding most commonly used was honey followed by ghutti which is consistent with previous studies and this might be due to lack of awareness and education as most of mothers in our study were illiterate or it might be due to their traditional or cultural practices . In some other studies also, mothers follow inappropriate practices which can endanger infant's life such as giving pre-lacteals or supplements or making a delay in first breast milk after birth [21]. Despite of the fact that colostrums introduction to new born as first feed was reasonably done, preponderance of other unsafe customary methods practiced for new born care showed the necessity for supporting health education programs on refining baby care practices [22] Additionally a national level intervention is needed to improve the time to begin the complementary feeding. [23]. In order to improve the prevalence of colostrum's administration, timely start of breast milk, exclusive breast feeding, as well as reducing risks of infections and death among newborns, it is inevitable to provide ample care and funding plus education to mothers of newborns and their families[24]. In this study we observed that majority of the children were given commercially prepared baby food as the first complementary feed, Moreover mothers avoid home prepared meals like Dalia (porridge) and khichri, this is probably due to commercialization and changing trends towards ready-made baby food. Similar trends has been reported by the other studies of Pakistan in which they found poor weaning practices regardless of adequate knowledge among mothers and care-givers[25].

Recommendations:

It has been recommended that the exclusive breastfeeding should be focused primarily and promoted for the first six months of life of every newborn and vigorous efforts are required to enhance the breast feeding practices in our society as this will help in reducing the infant's mortality.

Conclusion:

This study concluded that awareness and knowledge regarding breastfeeding is appropriate among mothers and care givers but the practices of exclusive breastfeeding are not at is factor.

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