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Gaps between awareness and practices of breast feeding among mothers attending a paediatrics clinic in a rural hospital along the coastal belt of south kerala

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ABSTRACT

BACKGROUND

Promotion of proper breastfeeding practices in the first year of child is the most cost-effective intervention to reduce childhood morbidity and mortality in developing countries. Early initiation of breast feeding is very important for child's growth & development.

OBJECTIVES

To study the gaps between the awareness and practices of breast feeding among mothers of infants attending a paediatric clinic in a rural hospital of South Kerala and to find out the association of age group and parity with early initiation of breast feeding.

MATERIAL AND METHODS

A Cross sectional study was done in Chirayinkeezhu taluk hospital among mothers attending a paediatrics clinic from June 2012 to August 2012. The sample size was 200 and simple random sampling was used. Statistical analysis was done and chi-square test & percentages were calculated.

RESULT

94.5% of mothers knew that breast milk is essential for the growth of the child although 85.5% continued breast feeding even after a year. The gap between the awareness and practice for continued breast feeding at one year, early initiation, colostrum and exclusive breastfeeding was 9%, 12.5%, 4% and 12.5% respectively. The most common reason for non-initiation of early breast feeding was belief of not having enough milk secretion. Complementary feeding was started at the end of 3rd, 4th, 5th and 6th month by 49.5%, 44.5%, 39.5% and 36% of the mothers. There is a significant association between high parity and early initiation of breast feeding.

CONCLUSION

Early initiation of breast feeding is still not prevalent among mothers, mostly due to lack of awareness and cultural aspects. Hence Information Education and Communication activities should be made very effective to educate mothers. Mothers should be aware that time period for exclusive breast feeding is initial six months.

KEYWORDS: Breast feeding, Infants, Awareness, Mothers, Kerala.

INTRODUCTION

Breast milk provides the main source of nourishment and considered natural first food for babies. Early initiation of breast feeding is essential for child's growth. Breastfeeding is an important determinant for child growth and survival, birth spacing and prevention of childhood infections.^{2, 3} Breast milk is capable of improving infant immunity. 4 the beneficial effects of breastfeeding depend on many factors. Some of them are early initiation of breastfeeding, duration and the age at which the breastfed child is started with complementary feeding.⁵ All infants should be exclusively be on breast milk from birth up to at least six months of age. After that while breastfeeding should continue for up to two years of age or beyond, child should receive adequate complementary foods.⁶ Exclusive breastfeeding also provides health benefits for mothers. Decisions regarding early initiation and duration breastfeeding in low-income developing countries are influenced by many factors including education, employment, and place of delivery, family pressure and cultural values.⁷ Breastfeeding practices vary a lot in different places. The practice of breastfeeding among Indian mothers is almost seen everywhere, but early initiation of breastfeeding is missing in many parts. Breastfeeding practices are shaped by their beliefs, which are influenced by many socio economic and cultural factors.8 It has been estimated that 1.3 million deaths could be prevented each year if babies were exclusively breastfed from birth for six months. "Baby Friendly Hospital" initiative (BFHI) was adopted in almost all of hospitals in Kerala to promote breastfeeding.⁹ but still there are loopholes and several issues causing delay in initiation of early breastfeeding and continuation of exclusive breast feeding for first six months. Also, there is a considerable gap between the awareness and actual practice of breast feeding among mothers. With these facts in background this study was done with following objectives.

OBJECTIVES

1. To study and find out the gaps between the awareness and practices of breast feeding among mothers attending a pediatrics clinic in a rural hospital of South Kerala.

- 2. To find out the association of age group and parity with early initiation of breast feeding.
- 3. To impart health education related to breast feeding among mothers.

MATERIALS & METHODS

It was a cross-sectional study conducted among the pediatrics mothers attending clinic Chirayinkeezhu taluk hospital belonging to the coastal belt of South Kerala. The hospital is a field practice area of a private medical college. In a pilot study done prior to the study with 50 subjects showed expected percentage of the awareness of importance of breastfeeding to be 75. The required sample size was 200, for precision= 6% and desired confidence level 95%. Mothers attending the clinic with infants of age greater or equal to one year and who gave consent were included in study population. Mothers having child aged more than one and half years and those who do not gave consent were excluded from the study. Study period was from June to September 2012. In this period, 200 women were selected as study participants. Participants were selected using simple random technique. Structured pre tested questionnaire was used to collect data from the participants. Questionnaire was prepared in the local language. Pilot study was conducted prior to the study and necessary corrections have been done. Variables included in the study are socio demographic profile, details of child birth like parity, initiation of breast feeding and duration of exclusive breast feeding. Kuppuswamy socio economic scale was utilized to assess socio-economic status of mothers.

ETHICAL CONSIDERATION AND PERMISSION

Ethical clearance was obtained from the Institutional Ethical Committee of our college. Permission was obtained from the concerned authorities (Medical Superintendent) to conduct the study in the Chirayinkeezhu taluk hospital.

STATISTICAL ANALYSIS

Data collected was entered in Microsoft Excel work sheet. Analysis was done using SPSS Version 16. Percentages were used to find out various frequencies and chi-square test was done to find out association between qualitative variables in the study. p values were kept significant at the level 0.05.

RESULT

200 mothers who visited the immunization clinic were interviewed using a pretested questionnaire and proforma was filled by the primary investigator herself.

Table 1: Socio demographic profile of the study population (N=200)

Variables	Characteristics	n (%)
	<24	107 (53.5)
Age (in years)	25-30	64 (32.0)
	>30	29 (14.5)
	Higher Secondary	112 (56.0)
Education	Degree and above	64 (32.0)
	Professional	24 (12.0)
Type of Family	Joint	124 (62.0)
	Nuclear	76 (38.0)
	Lower	72 (36.0)
Economic Status	Middle	121(60.0)
	Upper	7 (3.5)
	First Child	65 (32.5)
Parity	Second Child	91 (45.5)
	More than two child	44 (22)
Working Mothers	Yes	166 (83.0)
	No	34 (17.0)

SOCIO-DEMOGRAPHIC PROFILE OF MOTHERS

Table 1 shows that among the 200 mothers, 107(53.5%) were less than 24 years of age, 64 (32%) belonged to 25-30 years and 29(14.5%) were more than 30 years of age. 56% of mothers were having high school education. 62% of mothers belonged to

joint families. 36% of mothers were of lower socioeconomic status as per Kuppuswamy's Socioeconomic Status Scale. According to parity 32.5% were primipara. Religion wise 52% (104) were Hindus, 35% (70) were Muslims and 26 (13%) were Christians. Out of 200 mothers, 166 (83%) were working mothers.

Table 2: Awareness of breast feeding among mothers (N=200)

Variables	Characteristics	
	Yes (%)	No (%)
Is breast feeding essential?	189 (94.5)	11 (5.5)
Breast feeding should be started as early as possible	115 (57.5)	85 (42.5)
Colostrum is very important for a new born child	89 (44.5)	111 (55.5)
Exclusive breast feeding should be continued for six months	97 (48.5)	103 (51.5)

AWARENESS ABOUT BREAST FEEDING

Table 2 shows that 94.5% of mothers were aware of the fact that breast milk is essential for the growth of the child. Although only 57.5% of mothers were aware about the importance of early initiation of breast feeding. 54% (108) of the study population were aware of the importance of colostrums (first milk). When asked about the importance of colostrum among 108 mothers, 38.9% were aware about its ability to increase immunity of child, 41.7%

thought it is essential for brain development, 14.8% related it to better health of child and 4.6% were of the view that colostrum increases milk secretion. Only 48.5% of mothers were aware that exclusive breast feeding should be continued for six months and then complementary feeding should start by then.

80.5% mothers were aware about the importance of supplementary diets during lactation. 52.5% were aware about the services provided by anganwadi for antenatal mothers. Awareness and importance of breast feeding was given to these mothers majorly by media and by doctors.

Table 3: Practice of breast feeding among mothers (N=200)

Variables	Characteristics	
	Yes (%)	No (%)
Continue breast feeding baby even after a year	171 (85.5)	29 (14.5)
Breast feeding started early	90 (45.0)	110 (55.0)
Given Colostrum/ first milk to the child	81 (40.5)	119 (59.5)
Exclusive breast feeding continued for six months	72 (36.0)	128 (64.0)

PRACTICE OF BREAST FEEDING

Out of 200 mothers, 171 (85.5%) actually continued breastfeeding to their child even after a year [Table 3]. 45% (90) of mothers had initiated early breast feeding. Reasons for non-initiation of early breast

feeding among 110 mothers were belief of not enough milk secretion in 63.7% mothers, due of caesarean section in 43.7% mothers and retracted nipple in 14.5%.

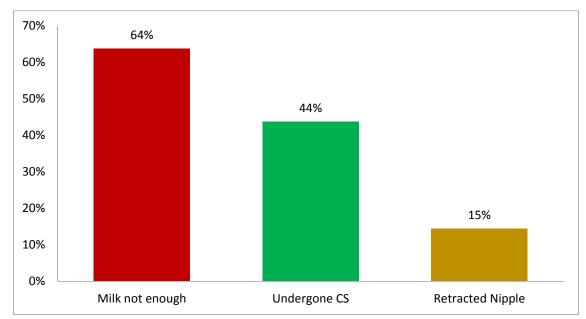


Figure 1: Reasons for non-initiation of early breast feeding (n=110)

(Multiple responses were allowed)

When asked how many of them have given Colostrum to their child, 40.5% mothers told us that they have given it. Exclusive breast feeding for six months was practiced by 72 (36%) mothers. Complementary feeding was started at the end of $3^{\rm rd}$,

4th, 5th and 6th month by 49.5%, 44.5%, 39.5% and 36% of the mothers.73.5% of mothers were not taking any supplementary diet during lactation. Only 40.5% were actually utilizing the services provided by anganwadi for mothers.

Table 4: Gaps between awareness and practice of breast feeding (N=200)

	Characteristics		
Variables	Awareness (%)	Practice (%)	Gap
Importance of breastfeeding	189 (94.5)	171 (85.5)	9%
Early initiations	115 (57.5)	90 (45.0)	12.5%
Colostrum	89 (44.5)	81 (40.5)	4%
Exclusive breast feeding	97 (48.5)	72 (36.0)	12.5%

GAPS BETWEEN AWARENESS AND PRACTICES OF BREAST FEEDING

We can see from Table 4 that there are considerable gaps between the awareness and practice of breastfeeding among mothers. There was a gap of 9% between the awareness of importance of breastfeeding and actual practice of breastfeeding beyond one year of the child. Similarly the gap

between awareness and practice for early initiation of breastfeeding was 12.5%. Although 44.5% mothers knew about the importance of colostrums, only 40.5% actually continued giving it to their child thereby causing a gap of 4%. The gap between awareness and practice for exclusive breastfeeding was 12.5%.

Table 5: Association of age group and parity with practice of early initiation of breast feeding

	Early initiation of breast feeding		Statistics	
Age group (N=200)	Yes (%)	No (%)		
<25	32 (22.0)	75 (78.0)		
25-30	40 (62.5)	24 (37.5)	$\chi^2 = 21.182$, Df=2	
>30	18 (62.0)	11 (38.0)	p=0.001	
Total	90 (45)	110 (55)		
Parity (N=200)				
First Child	14 (55.6)	51 (44.4)	$\chi^2 = 26.703$, Df=2	
Second child	45 (49.5)	46 (50.5)	p=0.001	
More than Two Child	31 (70.0)	13 (30.0)		

EARLY INITIATION OF BREAST FEEDING

Table 5 shows that 90 mothers initiated breast feeding early. The mothers who were of older age group (more than or equal to 25 years) started early initiation more as compared to those of less than 25 years of age and this difference was significant. There is a significant association between parity and early initiations of breast feeding. We could find that the mothers who have one or more child have better breast feeding practices than the primigravidae. Most of the primigravidae mothers had problem in initiation of breast feeding. Problems were due to pain and discomfort during caesarean section, retracted nipple and lack of milk secretion.

DISCUSSION

Breast milk is the best gift a mother can give to her infant. A major national concern today is the threat of

lives of millions of infants and young children in India. The irony of the fact is that most of these deaths result from preventable diseases. Various studies done in India validate the omnipresent malpractice of suboptimal breastfeeding behavior among Indian women. 10-15 94.5% of mothers knew about the importance of breast milk and breast feeding, According to National Family Health Survey (NFHS)-3, knowledge about breast feeding among mothers was 95%.16 A study done in Dhaka city showed that 66% of the respondents have good knowledge regarding breastfeeding. 17 40.5% mothers told us that they have given colostrum to their child. Colostrum is very rich in vitamins, minerals, protein and immunoglobulins which protects the child from various infections. 18 Exclusive breast feeding for six months was practiced by 36% mothers. In a recent study done in Pune, 48.6% babies were exclusively

breast fed. 19 In another study conducted in Bahawalpur, found the exclusive breast feeding rate to be 30 %. ²⁰ Harnagle and Chawla conducted a study among the lactating mothers and found the initiation of breast feeding among them within 6 hours was found to be 63.6%. In this study it was found that 45% mothers started breast feeding within a hour.21 Breast milk should be initiated within half an hour of normal delivery.²² If there is a delay in initiation of breastfeeding, it leads to a delay in the development of oxytocin reflexes. These reflexes are important for the contraction of the uterus and also the breast milk reflex. Studies show that if the breastfeeding begins early, this process also starts early. Therefore, a better impact on the after-birth period, which ultimately helps in the earlier initiation of the secretion of breast milk.²³ Complementary feeding, was started at the end of 6th month by 36% of the mothers. Too early or late introduction of complementary feeding is very common and is shown to be responsible for under nutrition among children.24 The gap between the awareness and practice for continued breast feeding at one year, early initiation. colostrum and exclusive breastfeeding was 9%, 12.5%, 4% and 12.5% respectively. A study done by Tuan et al in

Vietnamese mothers found the percentages of mothers with an awareness-practice gap for early initiation of breastfeeding, exclusive breastfeeding and continued breastfeeding at 1 year were 34%, 66% and 19% respectively. ²⁵

CONCLUSION

Early initiation of breast feeding is still not prevalent among mothers, mostly due to lack of awareness and cultural aspects. Hence Information, Education and Communication (IEC) activities should be made very strong from the grass root level to educate mothers and other family members regarding importance of early initiation of breast feeding. There is a gap between the mothers and their awareness about breast feeding which has to be bridged by continuous effort from the health sector.

LIMITATIONS

Since it is an awareness study, no intervention could be done. If it was a community based study with more sample size results of the study could have been generalised more to public.

SOURCE OF SUPPORT: Nil

CONFLICT OF INTEREST: None declared

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