

# Barriers in Compliance to IYCF (Infant and Young Children Feeding) Guidelines about Exclusive Breast Feeding (At KIMS, Karad, Maharashtra)

Dr. Amit D. Galgali<sup>1</sup>, Dr. R. A. Langade<sup>2</sup>, Dr. Prashant Shah<sup>3</sup>, Dr. Shreya Menon<sup>4</sup>

<sup>1</sup>Post-Graduate Student, Department of Pediatrics, KIMS, Karad, Maharashtra, India

<sup>2</sup>Associate Professor, Department of Pediatrics, KIMS, Karad, Maharashtra, India

<sup>3</sup>Assistant Professor, Department of Pediatrics, KIMS, Karad, Maharashtra, India

<sup>4</sup>Post-Graduate Student, Department of Pediatrics, KIMS, Karad, Maharashtra, India

**Abstract:** Millions of deaths can be averted by scaling up exclusive breast feeding, EBF rate By end of one and half month is seen in only 69% of mothers and by 4-6 months only one quarter of mothers are giving EBF to their babies. Factors influencing non-initiation or early cessation of exclusive breastfeeding had already been evaluated under NFHS data but only for babies born in community settings, these factors need to be investigated for the neonates born out of community settings. Also identification of the barriers to the Exclusive Breast Feeding is necessary and to overcome these barriers is absolutely needed to improve the rate of EBF. Strict adherence to the guidelines laid down by ' Infant and Young Children Feeding Practices for Exclusive Breast Feeding ' is the need of hour to improve the rate of EBF practices.

**Keywords:** IYCF, Barriers, Compliance, Exclusive Breast Feeding

## 1. Aims and Objectives

To identify the barriers in compliance with exclusive breast feeding about IYCF guidelines and providing IYCF guidelines to mothers/caregivers of babies below 6 months about the benefits of exclusive breast feeding.

## 2. Materials and Methods

It's an Hospital based Prospective Observational study, conducted at Krishna Institute Of Medical Sciences, Hospital and University, Karad, Maharashtra. All Babies delivered in our institute and neonates attending our OPD were enrolled in this study. They were followed up for 6 months and mothers were counselled for EBF as per IYCF guidelines. Data was also collected from the post natal ward of our hospital and also following our counselling service programme 'YASHODA'. The follow-up data was collected in pediatric OPD while they came for immunization. Recorded data was in the form of 'Questionnaire' which was neatly documented and kept, and later analysed.

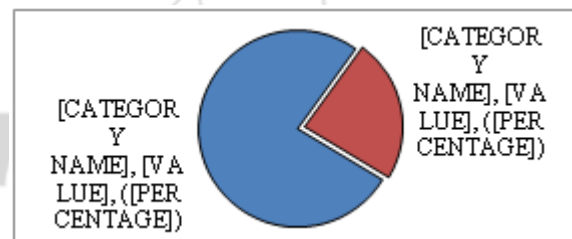
## 3. Results

### 1) Distribution of study participants according to type of delivery

Type of delivery	Frequency	Percentage
Vaginal	191	76.4%
Caesarean	59	23.6%
	250	100.0%

Type of delivery was also taken as one of the variable in the study. Among the 250 study participants, 191 (76.4%)

babies were delivered vaginally and remaining 59 (23.6%) babies were delivered by caesarean section.



### 2) Distribution of study participants as per initiation of breast feeding within one hour

Type of delivery	BF Initiated in 1 hour (n=153)		Not initiated in 1 hour (n=97)		p value
	Freq.	percentage	Freq.	percentage	
Vaginal	149	88.01 %	42	43.03 %	<0.01*
Caesarean	04	11.99 %	55	56.97 %	

Proportion of vaginal delivery was significantly less in those who initiated BF after one hour compared to those who initiated within an hour. Thus probability of late initiation of BF was high in caesarean cases.

### 3) Distribution of study participants according to reason for late initiation

Reason for initiation of BF after 1 hour	Frequency	Percentage
Fatigue	42	25.1%
Delay in shifting Baby to mother side	18	10.8%
Asked by some family members not to do so	12	7.2%
Asked by some health professional not to breastfeed due to medical reasons	10	6.0%
I thought I would not have sufficient milk secretion	5	3.0%
No / poor secretions	25	15.0%
Caesarean section	55	32.9%
Total	97	100.0%

#### 4) Feeding practices during follow up visits

Feeding practices	15 days		1.5 months		2.5 months		3.5 months		6 months	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
EBF	181	74.8%	137	59.8%	116	52.7%	93	43.1%	50	26.9%
Mix feed	58	24.0%	75	32.8%	87	39.5%	91	42.1%	87	46.8%
Only top feed	3	1.2%	17	7.4%	17	7.7%	32	14.8%	49	26.3%
Total	242	100%	229	100%	220	100%	216	100%	186	100%

Feeding practices were assessed during follow up visits. Exclusive breast feeding rate was 74.8% during the first follow up visit at 15 days. However this rate drop during the subsequent follow up visits from 59.8% in second visit to 43.1% on fourth visit on 3 and half months. Most of the mothers had initiated top feed during this time and on 6 months only 26.9% child were on EBF.

#### 5) Association of sociodemographic factor with initiation of BF on First day

	BF Initiated in 1 hour (n=153)		Not initiated in 1 hour (n=97)		P value
	Freq.	Percentage	Freq.	Percentage	
<b>Age of mother</b>					
≤25 years	60	72.3%	93	73.1%	0.89
>25 years	23	27.7%	34	26.9%	
<b>Education</b>					
Illiterate	12	14.5%	43	25.7%	0.04*
Literate	124	85.5%	71	74.3%	
<b>Occupation</b>					
Working mother	19	22.9%	43	25.7%	0.62
Other	64	77.1%	124	74.3%	
<b>Gestational age</b>					
37-39 weeks	62	74.7%	131	78.4%	0.51
>39 weeks	21	25.3%	36	21.6%	
<b>Type of delivery</b>					
Vaginal	149	88.01%	42	70.7%	<0.01*
Caesarean	04	11.99%	55	29.3%	
<b>Gender of Baby</b>					
Male	41	49.4%	78	46.7%	0.69
Female	42	50.6%	89	53.3%	

Initiation of BF is not associated with age of mother, occupation of mother, gestational age and Gender of the baby. Proportion of Illiterate mother was significantly more in those who initiated BF after one hour compared to those who initiated within an hour. Thus probability of late initiation of BF was high in illiterate mother. Proportion of vaginal delivery was significantly less in those who initiated BF after one hour compared to those who initiated within an hour. Thus probability of late initiation of BF was high in caesarean cases.

#### 6) Association of sociodemographic factor with exclusive BF at 6 months

	EBF up to 6 months (n=50)		Top/Mix feed at 6 months (n=200)		P value
	Freq.	Percentage	Freq.	Percentage	
<b>Age of mother</b>					
≤25 years	26	42.0%	44	22.0%	<0.01*
>25 years	156	68.0%	24	78.0%	
<b>Education</b>					
Illiterate	63	90.0%	47	25.0%	0.02*
Literate	05	10.0%	150	75.0%	
<b>Occupation</b>					
Working mother	7	14.0%	55	27.5%	0.048*
Non-working	145	86.0%	43	62.5%	
<b>Gestational age</b>					
37-39 weeks	37	74.0%	156	78.0%	0.54
>39 weeks	13	26.0%	44	22.0%	
<b>Type of delivery</b>					
Vaginal	149	88.01%	42	43.03%	0.41
Caesarean	04	11.99%	55	56.97%	
<b>Gender of Baby</b>					
Male	24	48.0%	95	47.5%	0.94
Female	26	52.0%	105	52.5%	

EBF practices at 6 months is not associated with gestational age, type of delivery and Gender of the baby. At 6 months EBF rate was significantly higher when mother was more than 25 years of age. At 6 months Non-EBF rate was significantly higher even though mother was literate as compared to illiterate mothers in whom EBF rate was higher. At 6 months EBF rate was significantly higher in nonworking mother's.

#### 4. Results

During the enrolment period 250 neonates were born, all of them were full term and ≥ 2500grams at birth. Baseline knowledge regarding benefits of breastfeeding was present in 79.1 % mothers. However, nearly half of the mothers expressed need of water along with breast feeds. Around 89 % of the primi-mothers had seen some other mother nursing and feeding the baby. Confidence of initiation of feeds was absent in 11.4% of the mothers. At the end of 6 months Only, 24.4 % mothers felt that formula feed was not required

by the baby. All of them felt that after 4 months either topmilk/water was needed by the baby. During the hospital stay 47.2 % mothers gave breast feeding after one hour but within 24 hours and faced problems in giving breastfeeds of which —Bing Fatigued Out” was the most common problem , in 18.8 % mothers, 7.4% of the nursing mothers had cracked / sore nipples ,engorgement of breasts and 11.4%mothers had difficulty in giving EBF because of flat/inverted/ retracted nipples. Multiple problems were faced by 5.7% of the mothers. Breast feeding was initiated within one hour of birth by 61.03 % mothers. Delay in first feed was influenced by mode of delivery. First hour feeding was less in neonates who were given pre-lacteal feed( $p=0.024$ )Education status of the mother and gender of the child had no influence on initiation of first feed.

Further, babies born by caesarean section got their first feed late than the babies born by vaginal delivery.Around 78% of the mothers were giving EBF by the time they were discharged from the hospital. Follow up rate at end of 15 days, 6 weeks ,10 weeks ,14 weeks and 6 months was 74.8%, 59.8% , 52.7% ,43.1 % and 20.8 % .The rate of EBF has fallen down from 78.7%.% to 26.9 % at end of 6 months of postnatal age.

## 5. Conclusion

Mode of delivery (Caesarean section) was the most common barrier for notinitiating Breast feeding within one hour . And Exclusive breast feeding at 6 months was less in working and literate mothers , at six months of age hence the barrier. Hence women delivering by caesarean section need more attention to initiate breast feeding with in a hour . Also the literate women need to be counselled morefor importance of EBF as these group get easily influenced by the funda of top feeding , AND working women also need to be educated more about the benefits of EBF and if possible option of extending maternity leave , option of work from home or shifting of home near to work place or viceversa,etcare few of the solutions to overcome the barriers against Exclusive Breast Feeding.

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