

Original Article

EXCLUSIVE BREASTFEEDING PRACTICES AMONG POSTNATAL MOTHERS: HOW EXCLUSIVE ARE THEY?

Mohan P Joshi¹, Pushpa M Durge², Shams Khan³, Samina M Ausvi⁴**Financial Support:** None declared**Conflict of interest:** None declared**Copy right:** The Journal retains the copyrights of this article. However, reproduction of this article in the part or total in any form is permissible with due acknowledgement of the source.**How to cite this article:**Joshi MP, Durge PM, Khan S, Ausvi SM. Exclusive Breastfeeding Practices Among Postnatal Mothers: How Exclusive Are They?. *Natl J Community Med* 2014; 5(3):276-9.**Author's Affiliation:**¹Associate Professor; ²Ex-Professor & HOD; ³Ex-Assistant Professor; ⁴JR - II, Department of Community Medicine, NKPSIMS & RC, Nagpur (Maharashtra) India**Correspondence:**Dr. Mohan P. Joshi,
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INTRODUCTION

In August 1990, WHO and UNICEF had jointly adopted the Innocenti Declaration on the protection, promotion and support of breastfeeding.¹ Exclusive breastfeeding means no drinks like honey, water, glucose water, gripe water, juices, vitamins, animal or powdered milks or foods other than breast milk are given for first 6 months to the babies.²

Exclusive breastfeeding during the first six months improves the nutritional status of young children and reduces morbidity and mortality. Breastfeeding has been accepted as the most vital intervention for reducing infant mortality and ensuring optimal growth and development of children.³ More than 15% of 24 lakh child deaths could be averted in India by optimal breastfeeding practices.⁴ Breastfeeding is the ideal method suited for the physiological and psychological needs of an infant.⁵ Poor breastfeeding practices are widespread all over the world. It is estimated that sub-optimal breastfeeding, especially non-exclusive breastfeeding in the first 6 months of life, results in 1.4 million deaths and 10% of the disease burden in children younger than 5

ABSTRACT

Background - This study is designed to explore the breastfeeding practices among postnatal mothers and factors that determine exclusive breast feeding.

Methods -This cross sectional study was carried out at immunization clinic at UHTC, under the tertiary care hospital in Central India during August 2012 - July 2013. The data was collected from 600 postnatal mothers using a structured proforma which was analyzed using Epi-info7.

Results -Out of 600 PNC mothers EBF was practiced in only 1.16% mothers and majority (60.90%) of them were illiterate and from upper middle (50%) socioeconomic status. Among non exclusive breastfeeding, majority of mothers had given Ghutti drops (28.8%), gripe water (21.41%), glucose water (16.86%). The period of continuation of breastfeeding had inverse association with education of mother, i.e. 70.26% illiterate mothers were continuing breastfeeding for 12 months as compared to 2.36% mothers having diploma /degree. However practice of EBF was more prevalent amongst upper middle SE class (50%) as compared to lower SE class (11.36%). There was highly significant association for initiation of breastfeeding within first hour with HE received during ANC period ($p < 0.0001$). The practice of EBF was 12% for under 2 month infants & merely 1% at the age of 6 months.

Conclusion - Hence programmes, which support and encourage EBF practices particularly at a primary care level, focusing more on younger, well-educated women and those from lower socioeconomic class is a need of hour.

Keywords - Exclusive breastfeeding, postnatal mothers, Health education

years of age.⁶ Reviews of studies from developing countries show that infants who are not breastfed are 6 to 10 times more likely to die in the first months of life than infants who are breastfed.^{7, 8} The key to successful breastfeeding is Information, Education and Communication (IEC) strategies aimed at behaviour change. Very few women in India have access to proper counselling services on infant and young child feeding.⁹ In such a situation, the main source of information to mothers is through family and friends, which is often inadequate.¹⁰

Hence this study was conducted to study the actual pattern of breastfeeding practices in the urban slum and to study the influence of socioeconomic and cultural factors on breastfeeding.

MATERIAL AND METHODS

A cross sectional study was conducted amongst 600 mothers having infant up to 1 year age and attending immunization clinic at Urban Health & Training Centre under Dept of Community Medicine of Tertiary Care Hospital during study period from August 2012 to July 2013 The infants

brought to clinic by person other than mother & mothers with postpartum psychosis were excluded from the study. We interviewed all those PNC mothers who have attended the immunization clinic during study period fulfilling the requirements for the study protocol and the total number thus interviewed was 600. Interview was taken by the female junior resident from the community medicine department at immunization clinic where a separate cabin was maintained for the privacy and confidentiality of the interview. The informed consent from all the study subjects was taken keeping their due confidentiality. The permission and the ethical clearance were taken from the Institutional Ethical Committee of Tertiary Care Institute before starting this study. All 600 mothers were interviewed during their visit to centre and information about socio-culture factors, practices of breastfeeding etc were collected in a pretested and predesigned proforma. Modified B.G.Prasad scale was used for socio economic status.¹¹ We didn't get any mother in upper SES & got very few mothers in lower middle SES, so for analysis purpose we combined middle and lower middle SES.

RESULTS

Among 600 lactating PNC mothers who participated in this study only 7 (1.16%) were practicing exclusive breast feeding & majority (98.84%) were practicing non-exclusive breastfeeding practices. Among non exclusive majority i.e. 171 (28.83%) mothers had given ghutti drops as advised by private practitioner or health worker and 127 (21.41%) had given gripe water to their babies on one or many occasions. Other common items served were plain boiled water

(16.86%), infant milk formulas (11.29%), Glucose/sugar water (8.09%), semisolid items (6.74%), juice (4.38%) and unprescribed medicine (2.36%) as shown in Table 1.

Table 1: Items used for non-exclusive breastfeeding (n=593)

Items used in infant feeding	Frequency (%)
Ghuti (Ayurvedic Vitamin) drops	171 (28.83)
Gripe water	127 (21.41)
Plain water	100 (16.86)
Infant formula	67 (11.29)
Glucose water	48 (8.09)
Solid, semisolid	40 (6.74)
Juice	26 (4.38)
Unprescribed (Medicine)	14 (2.36)

It was equally surprising to note that the total duration of breastfeeding was less than six months in 36.66% of mothers, while only 63.44% of mothers were continuing breast feeding up to 12 months. When this was studied in relation to literacy and socioeconomic status of mothers, it was seen that socioeconomic status of mothers had significant association with duration of breastfeeding as shown in Table 2 & 3. It was seen that only 11.36% of mothers from lower socioeconomic class were breastfeeding their baby up to 6 months as compare to 50% mothers from upper socioeconomic class. This might be attributed to early return to their job work by the mothers from lower socioeconomic classes. The shorter duration of breastfeeding was noted among mothers with higher education and prolonged duration of breastfeeding was common among poor and illiterate mothers.

Table 2: Period of continuation of breastfeeding according to literacy status of mothers (n=600)

Literacy status	Duration of breastfeeding		Total (n=600) (%)	Odd's Ratio (95%CI)
	≤ 6 months (%)	6-12 months (%)		
Illiterate	134(60.90)	267 (70.26)	401(66.83)	1
Primary / Middle	53 (24.09)	79 (20.78)	132 (22)	1.33 (0.89-2.00)
High school	23 (10.45)	25 (6.57)	48 (8)	1.83 (1.00-3.35)
Degree / Diploma	10 (4.54)	09 (2.36)	19 (3.1)	2.21 (0.87-5.57)
Total	220 (100%)	380 (100%)	600(100%)	

$\chi^2 = 6.88, p = 0.0869$

Table 3: Period of continuation of breastfeeding according to socioeconomic status of mothers

Socioeconomic status (Modified Prasad Scale)	Duration of breastfeeding		Total (n=600) (%)	Odd's Ratio (95%CI)
	≤ 6 months (%)	6-12 months (%)		
Upper (≥ 4885 Rs)	-	-	-	-
Upper middle (2442.50 – 4836.15 Rs)	110(500)	100 (26.31)	210 (35)	5.36 (3.22-8.92)
*Middle & Lower middle (732.84–2393.65Rs)	85 (36.63)	158 (41.57)	243(40.5)	2.62 (1.58-4.34)
Lower (< 732.84 Rs)	25 (11.36)	122 (32.10)	147(24.5)	1.00
Total	200 (100%)	380 (100%)	600 (100%)	

$\chi^2 = 46.2, p = 0.000; OR=Odds' Ratio$

Note - * we didn't get any mother in upper SES & got very few mothers in lower middle SES so for analysis purpose we combined middle and lower middle SES.

Among the study subjects only 58 (9.6%) were seen to be continuing breastfeeding even after the period of 12 months. It was seen that the insufficient milk was the main reason for discontinuation of breastfeeding within 6 months duration among 49.49% of study subjects while it was seen that 227 out of 322 (70.49%) had discontinued breastfeeding during 6-12 months because they had started weaning food.

Another common, yet preventable reason for discontinuations of breast feeding before 6 months was the occurrence of cracked nipples was seen in 14.54% mothers, while successive pregnancy during PNC period was seen among 11.18% mothers as shown in Table 4.

Table 4: Reasons for discontinuation of breastfeeding in relation to duration

Reasons	Duration of breastfeeding		Total
	<6 months (%)	6-12 months (%)	
Insufficient milk	108(49.49)	35(10.86)	143
Weaning	68 (30.90)	227(70.49)	295
Pregnancy	02 (0.90)	36 (11.18)	38
Illness of baby	07 (3.18)	13 (4.03)	20
Cracked nipple & infection	32 (14.54)	-	32
To maintain figure	03 (1.36)	07 (2.17)	10
Illness of mother	-	04 (1.24)	4
Total	220 (100%)	322 *(100%)	542

*58 mothers continued breastfeeding after 12 months

When the initiation of breastfeeding was studied in relation to health education received during ANC period, it was seen that there was highly significant association between initiation of breastfeeding and information received by mother regarding breastfeeding during ANC. It was surprising to note that nearly 50% of study subjects had not received any information regarding EBF during her ANC period. It was seen that 69.20% mothers who initiated breastfeeding within 1 hour of birth had exposure to HE, as compared to 10.73% of mothers who had no exposure to HE regarding EBF. The breastfeeding was started earlier in mothers who had received knowledge about EBF during ANC period in statistically highly significant manner ($\chi^2=213.34$, OR =18, $p<0.0001$) as shown in Table 5.

Table 5: Information received regarding breastfeeding during ANC and initiation of breastfeeding

Information received	Initiation of breastfeeding(hrs)		Total (%)
	Within 1 hr (%)	After 1 hr (%)	
Yes (n=302)	209 (69.20)	93 (30.80)	302 (100%)
No (n= 298)	32 (10.73)	266 (89.27)	298 (100%)
Total (n=600)	241(40.16)	359 (59.84)	600 (100%)

$\chi^2 = 213.34$, $p = 0.000$, OR(95%CI) = 18.68 (12.02-29.02)

Table 6: Pattern of breastfeeding practices among PNC mothers

Age of baby	2 months (%)	4 months (%)	6 months (%)
Exclusive	50 (12)	25 (6)	6 (1)
Non exclusive	550 (91.66)	575 (95.83)	594 (99)

Though the pattern of non exclusive breast feeding was seen to remained unchanged in all under 6 months old infants, the practice of exclusive breastfeeding was seen to decrease from 12% for under 2 month old infants to merely 1% at the age of 6 months of their age. This could be attributed to lack of sustained motivational educational efforts from health care providers regarding EBF in PNC mothers.

DISCUSSION

Among 600 lactating PNC mothers who participated in this study only 7 (1.16%) were practicing exclusive breast feeding & majority (98.84%) were practicing non-exclusive breastfeeding practices. These results are similar to those reported by Clara Aarts et al ¹² who reported exclusive breastfeeding only in 1.8% of their study sample. They had

strongly recommended that the private practitioners and all health workers should promote exclusive breastfeeding. Similar findings (5.13%) were also reported by Vyas shaili et al.¹³

Among non exclusive majority i.e. 171 (28.83%) mothers had given ghutti drops as advised by private practitioner or health worker and 127 (21.41%) had given gripe water to their babies on one or many occasions. Other common items served were plain boiled water (16.86%), infant milk formulas (11.29%), Glucose/sugar water (8.09%), semisolid items (6.74%), juice (4.38%) and unprescribed medicines. (2.36%) Similar findings were observed by Kar M, DeR ¹⁴ and Rama Ram et al ¹⁵ P.M.Durge et al ¹⁶ who also reported about pre lacteal feeding practices which were common among majority of study subjects.

Among the study subjects only 58 (9.6%) were seen to be continuing breastfeeding even after the period of 12 months. It was seen that the insufficient milk was the main reason for discontinuation of breastfeeding within 6 months duration among 49.49% of study subjects. Rama Ram ¹⁵ also reported discontinuation of breastfeeding before 6 months in 61.9% due to insufficient milk and discontinuation in 6-12 months because of weaning in 79.9% mothers in their study subjects. .

It was seen that 69.20% mothers who initiated breastfeeding within 1 hour of birth had exposure to HE, as compared to 10.73% of mothers who had no exposure to HE regarding EBF. Similar results were shown by Maheshwari.¹⁷

The period of continuation of breastfeeding had inverse association with education of mother i.e. 70.26% illiterate mothers were continuing breastfeeding for 12 months as compared to 2.36% having diploma /degree. Similar findings were also reported by Varshney A.¹⁸.

CONCLUSION & RECOMMENDATIONS

Practice of non-exclusive breastfeeding is very common. Different forms of top feed ranging from ghutti drop to infant formula are in use. Practice of EBF is decreasing with increasing level of education. As socioeconomic level is increasing, trends towards practicing EBF is seen. Insufficient breast milk, need for weaning feed, cracked nipple and infection are the common reasons for discontinuation of EBF. Impact of IEC during ANC is reflected in the form practising good breastfeeding practices like initiation of breastfeeding within first hour of delivery.

Based on the findings of this study, we emphasize effective, accurate and unbiased communication on exclusive breastfeeding, particularly during ANC period should be imparted to all ANC & PNC lactating mothers. The health education should be continued in a sustained fashion during postnatal period also. Looking at reasons for discontinuation of EBF, proactive measures must be taken by HCP and family members for the treatment of cracked nipples & postnatal infections .The mothers should be provided with nutritious diet through their ANC and PNC period, so that the mother can have sufficient milk for her baby. All the stakeholders and HCP in particular, should promote EBF seriously (not casually) so that the infants could be saved from the common morbidities like protein energy malnutrition, diarrhoea and respiratory tract infection.

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