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Original Research Article

Breastfeeding counselling and support: is it adequate? a descriptive study from Rohtak, India

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ABSTRACT

Background: Antenatal breastfeeding education and motivation along with postnatal encouragement and lactation support are likely to improve rates of early initiation and exclusive breastfeeding. This study was done to know whether antenatal and postnatal visits were utilized for promotion of optimum breastfeeding in addition to the routine obstetric services.

Methods: This descriptive cross-sectional type of community based epidemiological study was conducted in rural and urban field practice area attached to Department of Community Medicine, Pt. B. D. Sharma PGIMS, Rohtak. A total of 500 mothers were studied. A pre-tested semi-structured interview schedule was used for interviewing the study subjects and house to house visits were carried out to collect the information.

Results: Health functionaries were the source of information in 49.6% mothers in urban area as compared to only 29.2% in rural areas. Breastfeeding related information was better in the mothers counseled by health functionaries than not counseled group.

Conclusions: Health functionaries should be instructed to inform all pregnant women about the benefits and management of breastfeeding during antenatal as well as postnatal visits. Existing breastfeeding education and postnatal support is not adequate in the population studied and needs to be strengthened.

Keywords: Antenatal visits, Breastfeeding education, Exclusive breastfeeding, Early initiation of breastfeeding, Postnatal visits

INTRODUCTION

Breastfeeding is an important aspect of care for a mother and her infant. India is supposed to be a "breastfeeding nation" but breastfeeding rates in the country do not support this claim. The promotion and support of breastfeeding is a global priority and an important child-survival intervention and the World Health Organization advocates early initiation and exclusive breastfeeding for six months.²

According to NFHS-4, early initiation of breastfeeding rate is 42.8% and exclusive breastfeeding rate is 52.1%.³ Breastfeeding rates can be improved if the woman is

informed antenatally about the benefits of breastfeeding and prepared mentally with lactation support and encouragement during postnatal period for early initiation as well as exclusive breastfeeding.

In India, the health care provider during the antenatal visits is usually an obstetrician or a multipurpose health worker. Health workers also visit homes in their allotted areas and provide basic health services, health education regarding nutrition, motivation of pregnant women to come to the health centres for regular check-ups and for institutional delivery, support and encouragement for breastfeeding and many more. AWWs and ASHAs are supposed to help the health workers for the same. Health

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workers are the key people in the success or failure of lactation.⁴ Although opportunities exist during antenatal as well as postnatal visits, counseling mothers as well as support provided regarding breastfeeding is often not done or is not adequate. This deficiency is likely to affect the optimum breastfeeding practices. This study was undertaken to assess breastfeeding information among mothers and whether mothers have been counselled regarding breastfeeding during the contact point with health functionaries.

METHODS

Study design, study area and study period

This descriptive type of community based epidemiological study with cross-sectional design was conducted in rural and urban field practice area attached to Department of Community Medicine, Pt. B. D. Sharma PGIMS, Rohtak during 2012-13.

Study subjects

Mothers of 6-11 months old children who gave informed consent for the study

Sample size and sampling technique

Considering the prevalence of exclusively breastfed infants in India as approximately 46% and taking 10% absolute precision with a design effect of 2, sample size required comes out to be 192.⁵ A total of 500 mothers of 6-11 months old children, 250 each from urban as well as rural areas, were interviewed to know the effect of education on breastfeeding practices. In order to investigate the exclusive breastfeeding rate at 6 months, the present study included mothers with infants over 6 months age. We did not include mothers with children above 11 months to minimize the recall bias. A list of Anganwadis in the study area was obtained from the office of Child Development Project Officer.

There are 37 Anganwadi centres (AWCs) in the urban area and 136 AWCs in the rural area. Anganwadi workers were asked to prepare a list of mothers of children between age group of 6-11 months both in ruralarea as well as urban area to get a sampling frame. Mothers were selected by simple random sampling using lottery method from each list to cover the desired sample size.

Study tools and technique

A predesigned and pre-tested semi-structured interview schedule was used for interviewing the mothers. All the subjects were fully informed and written consent was taken before initiating the interview. House to house visits were carried out. If the individual was not contacted on three consecutive visits, the individual was excluded from the study and the next individual from the list was selected. Data was entered in MS Excel and the Statistical Package for Social Sciences (SPSS ver.18) was used to analyze data from this research.

RESULTS

In our study, exclusive breastfeeding rate was more in rural area (24.8%) than urban area (22.0%) but early initiation of breastfeeding rate was more in urban area (35.2%) as compared to rural area (29.2%). The main source of breastfeeding related information among mothers both in rural and urban area was mother/mother in law. Health functionaries were the source of counselling in 49.6% mothers in urban area as compared to only 29.2% in rural areas (Table 1).

Table 1: Source of breastfeeding counselling.

Source	Rural (N=250)	Urban (N=250)
Health functionary	73 (29.2)	124 (49.6)
Mother/Mother-in-law	189 (75.6)	165 (66)
Friends	52 (20.8)	89 (35.6)
Other Relatives	113 (45.2)	143 (57.2)

Table 2: Breastfeeding information known to "counseled" and "not counseled" mothers by Health Workers.

Health Information	Mothers (N=197)	counseled	Mothers not counselled (N= 303)		p value
	Aware	%	Aware	%	
Initiate breastfeeding immediately after birth	172	87.3	57	18.8	< 0.0001
Exclusive breastfeeding to be practiced for first 6 months	154	78.1	66	21.8	< 0.0001
No pre-lacteal feeds to be given	160	81.2	118	38.9	< 0.0001
Colostrum should be given to baby	121	61.4	148	48.8	0.0058
Correct technique of breastfeeding	16	8.12	6	2	0.0011
No dietary restriction for lactating mother	85	43.14	21	7	< 0.0001
Breastfeeding babies less than 6months do not require any water	69	35.03	12	4	< 0.0001
Continue breastfeeding during common illnesses	95	48.2	101	33	0.0009
Continue breastfeeding upto two years	75	38.07	142	46.86	0.0526

The values in parentheses indicate percentages

Table 2 shows that the awareness about correct breast feeding practices was found to be highly significant in women who were counseled by the health workers in comparison to those who were not especially with regard

to initiation of breastfeeding immediately after birth (87.3% vs. 18.8%), exclusive breastfeeding upto 6 months (78.1% vs. 21.8%) and pre-lacteal feeds (81.2% vs. 38.9%).

Table 3: Association of early and late initiation of breastfeeding with factors related to ANC.

Variable	Rural		Cianifiaanaa	Urban		Cionificance
Variable	Early Initiation	Late Initiation	Significance	Early Initiation	Late Initiation	Significance
ANC Visit ar	ıy					
Yes	66 (31.3)	145 (68.7)	$\chi^2 = 2.83$ df = 1	87(36.6)	151 (63.4)	$\chi^2 = 3.98$ $df = 1$
No	7 (17.9)	32 (82.1)	p>0.05	1 (8.3)	11 (91.7)	p<0.05
Frequency of	f Visits					
1-3	36 (29.3)	87 (70.7)	$\chi^2 = .555$	29(34.9)	54 (65.1)	$\chi^2 = .564$
≥3	30 (34.1)	58 (65.9)	df =1 p>0.05	58 (37.4)	97 (62.7)	df =1 p>0.05
ANC BF edu	cation					
Yes	7 (43.8)	9 (56.2)	$\chi^2 = .318$	11 (36.7)	19 (63.3)	$\chi^2 = .636$
No	59 (30.3)	136 (69.7)	df =1 p>0.05	76 (36.5)	132 (63.5)	df =1 p>0.05

The values in parentheses indicate percentages

Table 4: Association of early and late initiation of breastfeeding with hospital stay during delivery.

Variable	Rural Timely Initiation	Late Initiation	Significance	Urban Timely Initiation	Late Initiation	Significance
Hospital St				<u> </u>		
<48	66 (32.0)	140 (68.0)	$\chi^2 = 2.092$	74(37.2)	125 (62.8)	$\chi^2 = 1.402$
≥48	4 (17.4)	19 (82.6)	df = 1 $p > 0.05$	14(33.3)	28 (66.7)	df = 1 p>0.05
BF educati	on and support given					
Yes	67 (35.8)	120 (64.2)	$\chi^2 = 13.298$ df = 1 p<0.05	86(38.9)	135 (61.1)	$\chi^2 = 6.614$ df = 1 p<0.05

Table 5: Association of exclusive and non-exclusive breastfeeding with factors related to ANC.

Vaniable	Rural	Rural		Urban		G::C:			
Variable	EBF	Non EBF	Significance	EBF	Non EBF	Significance			
ANC Visit any	ANC Visit any								
Yes	55 (26.1)	156 (73.9)	$\chi^2 = 1.163$	54(22.7)	184(77.3)	$\chi^2 = 1.37$			
No	7 (17.9)	32 (82.1)	df = 1 p > 0.05	1(8.7)	11(91.7)	df =1 p>0.05			
Frequency of Vi	sits								
1-3	30 (24.4)	93 (75.6)	$\chi^2 = 3.567$	18 (21.7)	65 (78.3)	$\chi^2 = .073$			
≥3	25 (28.4)	63(71.6)	df =1 p>0.05	36 (23.2)	119 (76.8)	df =1 p>0.05			
ANC BF educat	ANC BF education								
Yes	6(37.5)	10 (62.5)	$\chi^2 = .010$	8 (26.6)	22 (73.4)	$\chi^2 = 1.713$			
No	49 (25.1)	146 (74.9)	df =1 p>0.05	46 (22.1)	162 (77.9)	df =1 p>0.05			

The values in parentheses indicate percentages

Table 3 reveals that on bivariate analysis of early initiation of breastfeeding with various ANC related factors, no statistically significant association was found with frequency of visits and whether breastfeeding

education imparted during Antenatal period in rural area, though rates were higher among those having ≥ 3 ANC Visits (34.1%) and those given education (43.8%). However, in urban area, statistically significant

association was seen between early initiation and any one ANC visit (36.6%) irrespective of frequency of visits.

Table 4 shows that practice of early initiation of breastfeeding was more in mothers who were educated about breastfeeding at the time of hospital stay in both rural (35.8%) as well as urban (38.9%) area. The association was statistically significant in both the areas irrespective of the duration of hospital stay.

Table 5 shows the association of exclusive and nonexclusive breastfeeding with factors related to ANC. For all those mothers who had their ante-natal check-ups done, 26.1% in rural and 22.7% in urban breastfed their babies exclusively, whereas, for those who did not avail the ANC services, 17.9% in rural and just 8.7% in urban

followed EBF practices. Moreover, 28.4% of all mothers who had a complete ANC check-up done, exclusively breastfed their babies as against 24.4% among mothers who had not taken a complete ANC check-up in rural areas. The values in urban area was opposite, with number of mothers with a complete ANC breastfeeding their babies more often. This association was found statistically non-significant.

Mothers who had been educated about breast feeding practices during ANC checkups did not fare that well with just 37.5% and 26.6% exclusively breastfeeding their babies in rural and urban areas respectively. Almost 25.1% and 22.1% from among those not educated previously followed EBF in rural and urban areas respectively.

Table 6: Association of exclusive and non-exclusive breastfeeding by hospital stay during delivery.

Variable	Rural		_ Significance	Urban		- Cignificance
v ar lable	EBF	Non EBF	Significance	EBF	Non EBF	Significance
Hospital Stay (hours)						
<48	52 (25.2)	154(74.8)	$\chi^2 = .008$	46(23.1)	153 (76.9)	$\chi^2 = .056$
≥48	6 (26.1)	17 (73.9)	df = 1 p>0.05	9 (21.4)	33 (78.6)	df = 1 p>0.05
BF education and supp	ort given					
Yes	52 (27.8)	135(72.2)	$\chi^2 = 3.316$	51(23.1)	170 (76.9)	$\chi^2 = .099$
No	6 (14.3)	36 (85.7)	df =1 p>0.05	4 (20.0)	16 (80.0)	df =1 p>0.05

The values in parentheses indicate percentages

Table 7: Association of exclusive and non-exclusive breastfeeding by PNC related factors.

Variable	Rural		Significance	Urban		_ Cianificanas
v al lable	EBF	Non EBF	Significance	EBF	Non EBF	Significance
Postnatal Visits						
Yes	45 (26.3)	126 (73.7)	$\chi^2 = .667$	47 (22.8)	159 (77.2)	$\chi^2 = .454$
No	17 (21.5)	62 (78.5)	df =1 p>0.05	8 (18.2)	36 (81.8)	df =1 p>0.05
BF education and su	pport given					
Yes	40 (28.4)	101 (71.6)	$\chi^2 = 1.747$	44(23.3)	145 (76.7)	$\chi^2 = .281$
No	5 (16.7)	25 (83.3)	df =1 p>0.05	3 (17.6)	14(82.4)	df =1 p>0.05

The values in parentheses indicate percentages

Table 6 shows that for mothers in rural areas who stayed for \ge 48 hrs in hospital, the percent of babies exclusively breastfed was higher (26.1%) as compared to those who spent <48 hrs in hospital (25.2%). The observation in urban area was 23.1% for <48 hrs stay and 21.4% for a stay of \ge 48 hrs. The values had no statistical significance.

In rural areas, the women with prior BF education (27.8%) breast fed their babies more exclusively as compared to 14.3% among women who hadn't been educated. For urban areas, the percent of exclusively breast babies were 23.1% and 20.0% among women with

prior education and without prior education respectively. The relation bore no significance statistically.

It was found that 26.3% of mothers in rural and 22.8% in urban followed EBF practices from among women who had been given post natal visits, whereas, 21% in rural and 18% in urban followed EBF practices among women who were not paid any post-natal visits. About 28% of mothers in rural and 23% in urban exclusively breastfed their babies after being provided education on breastfeeding whereas the rest did not. The mothers who

were not provided any education fed their babies less exclusively (Table 7).

DISCUSSION

In the present study, a total of 500 mothers were interviewed, 250 each from rural and urban area. Majority of the study participants (49.6%) belonged to age group 21-25 years. The mean age of mothers in rural and urban area was 24.80 years (SD = 3.237) and 25.50 years (SD = 3.697) respectively; the median number of children was two in both the areas.

The key to successful breastfeeding is likely to be Information, Education and Communication (IEC) strategies aimed at behavior change.⁶ It was found that only 29.2 in rural area and 49.6% mothers in urban area received Breastfeeding related information from health functionaries. Kishore S et al, also found in their study that only 39% of the mothers received counselling on breastfeeding.⁷ Most of the lactating mothers told their mothers-in law and other family members as a main source of information and usually consult them as they are experienced and live with them.

It was observed in our study that early initiation rate was higher among mothers who had at least one antenatal visit (Table 3). But on further questioning it was found that only one-tenth of these females had breastfeeding education during ANC visits. This reflects that our health care functionaries, though the opportunity exists, do not provide breast feeding education at the time of antenatal visit. Our finding was also supported by Jain et al.8 Institutional deliveries or hospital stay did not help in doing away with practices related to delayed breastfeeding and supplementary feeding as well as prelacteal feeds until unless health functionaries actively help the mothers in latching the baby and encouraging them to breastfeed exclusively. The present study also supports this finding that breastfeeding education and support imparted during hospital stay had positive association with early initiation. Barriers to early initiation like lack of confidence in mothers' ability to breastfeed, problems with the infant latching or suckling can be overcome by individualized encouragement from the health workers which will further help in increasing early initiation rates.

Another significant finding in the present study was that only 7.6% of mothers who availed antenatal services received instructions from the health care functionaries on exclusive breastfeeding at the time of ANC visits. Also, the rate of exclusive breastfeeding did not show any association with ANC visit, frequency of visits and breastfeeding education provided, if any, at the time of visit. No significant association was seen with education imparted to mothers at the time of hospital stay or during postnatal visits with exclusive breastfeeding both in urban and rural area. In contrast to this, Archana Patel found in her study that higher number of antenatal care

visits were associated with increased rates of exclusive breastfeeding.⁹ The discrepancy in our result can be due to the fact that health functionaries missed the opportunity to counsel the expectant mothers and they counselled half-heartedly which left on impact on the mothers. Although knowledge about correct breastfeeding practices was found to be highly significant in mothers who were counseled than those who were not, yet no significant difference was observed in practice. The possible justification for such findings could be promotion unsatisfactory and inadequate strengthening of breastfeeding by health functionaries. Again, lack of confidence, breast pain or soreness, perceptions of insufficient milk supply are some of the common reasons for early discontinuation of breastfeeding. These problems can be overcome if the woman is informed antenatally, individually as well as in groups, about the benefits of breastfeeding, prepared mentally for exclusive breastfeeding and provided support and encouraged during the postnatal visits to continue exclusive breastfeeding till six months. In a tertiary hospital in Singapore, a randomized controlled trial was conducted, and they also support our findings that antenatal breastfeeding education and postnatal lactation support, as single interventions based in hospital, both significantly improved rates of exclusive breastfeeding up to six months after delivery. 10

CONCLUSION

Health workers can have a great influence on infant feeding practices. It is the need of hour to strengthen training of health functionaries in breastfeeding counselling addressing both their attitudes and their skills. During antenatal and postnatal visits, health care providers should take the opportunity to give accurate information on breastfeeding to each and every mother, clarify misconceptions, manage breastfeeding problem, if any, in a supportive and encouraging way.

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Institutional Ethics Committee

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