Original Research Paper

Volume - 7 | Issue - 8 | August - 2017 | ISSN - 2249-555X | IF : 4.894 | IC Value : 79.96

Community Medicine

BREASTFEEDING PRACTICES AMONG MOTHERS ENROLLED AT ANGANWADIS IN URBAN SLUM AND RURAL FIELD PRACTICE AREAS OF A MEDICAL COLLEGE IN MUMBAI- A COMPARATIVE STUDY

Dr. Pragati G. Rathod	Assistant Professor, Dept. of Community Medicine, Govt. Medical College, Nagpur - Corresponding Author
Shruti S. Shukla	Post graduate student, Dept. of Community Medicine, Govt. Medical College, Nagpur
Prachala G. Rathod	Assistant Professor, Dept. of Microbiology, Vaishampayan Memorial Govt. Medical College, Solapur,

ABSTRACT Breastfeeding is one of the most important determinants of child survival, birth spacing, and prevention of childhood infections. The beneficial effects of breastfeeding depend on breastfeeding initiation and its duration. The cross-sectional observational and comparative study was carried out in rural and urban slum field practice areas of the Medical College in Mumbai from March 2008 to March 2009. Study included 104 mothers, 58 from rural and 46 from urban slum area who delivered in last 1year period. Colostrum was not given to babies in almost 45% in urban slum which is significantly higher than rural areas (20%). Present study revealed various inappropriate breast feeding practices that are prevalent in both urban slum and rural areas though surprisingly rural mothers had more favorable practices compared to urban slum mothers.

KEYWORDS : Breastfeeding practices, urban slum, rural, Mumbai.

BACKGROUND:

India is a home to wide diversity of people, who have different cultural practices in relation to newborn care and breast feeding. The main nutrition for the newborn is the breast milk. Better nutrition means stronger immune systems, less illness and better health. Breastfeeding is one of the most important determinants of child survival, birth spacing, and prevention of childhood infections and the importance of breastfeeding has been emphasized in various studies.[1,2] Breastfeeding can drastically reduce diarrhea by 50 % and respiratory infections by 33% , contributing hugely to child health and survival, potentially saving a large proportion of children under five years. Breastfeeding also increases IQ of all children rich or poor by 3 points.[3]

The above beneficial effects are modified by the timely initiation and duration of breastfeeding and prevalence of inappropriate infant feeding practices relating to colostrum feeding & prelacteals. According to IYCF guidelines, early initiation of breastfeeding; preferably within one hour, exclusive breastfeeding for the first six months of life i.e. 180 days, timely introduction of complementary foods (solid, semisolid) after the age of six months, continued breastfeeding for 2 years or beyond, age appropriate complementary feeding for children 6-23 months, along with breastfeeding, and active feeding for children during and after illness are recommended.[4] Very few women in India have right knowledge about breast feeding practices.[5] Mother's poor knowledge and negative attitude towards breastfeeding may influence practices and constitute barriers to optimizing its benefits. Hence, it is necessary that lactating mothers should have a positive attitude, adequate knowledge and appropriate practices of breastfeeding that can help to prevent pathogens from invading child's system.[6]

Lot of studies have been conducted comparing breast feeding practices in rural area with urban area, but very few with urban slums. Keeping this in focus, we conducted this cross- sectional study to compare the breast feeding practices in mothers enrolled at anganwadis in urban slum and rural areas in Mumbai.

MATERIAL AND METHODS:

The cross-sectional observational and comparative study was carried out in rural as well as urban slum which are the field practice areas of the Medical collge in Mumbai from March 2008 to March 2009.

The urban slum area with predominantly muslim population is served by a total of 34 anganwadis which were working for more than a year. The rural area has a total of 53 anganwadis of which 11 anganwadis were excluded from the study as they did not satisfy the inclusion criteria; hence the effective number of anganwadis were 42. For the study purpose 50% of the anganwadis were selected randomly by lottery method from both the areas. So the effective sample for both urban slum and rural area came out to be 17 and 21 anganwadis respectively.

As this study was a part of bigger study, i.e evaluation of ICDS project, convenience sampling was used to select the beneficiaries. Beneficiary interviews were taken from every third anganwadi and 15% of the beneficiaries were randomly selected from those enrolled at each selected anganwadi. Thus 46 beneficiaries from urban area and 58 from rural area were interviewed about their recent pregnancy after taking verbal informed consent. The questionnaire contained socio demographic characteristics like age, age at marriage, education and number of children. Beneficiaries were asked about the breast feeding practices in the recent pregnancy.

The study was initiated after obtaining approval from the Institutional Ethical committee. Informed verbal consent was taken from each mother.

Data entry was done in MS office excel 2007 and analysis was done with SPSS programme, version 16.

Data was presented in the form of numbers and percentages. Chisquare ($\chi 2$) test was applied to find out the significant difference between the proportions. A p value of less than 0.05 was considered significant.

RESULTS:

Study included 104 mothers, 58 from rural and 46 from urban area who delivered in last 1year period. Almost 98 % women in rural and 78 % in urban slum area were in the age group of 21 to 30 years. Almost 19% in rural and 28.3 % of women in urban slum area had married before they completed 18 years of age. 13.8 % in rural and 28.3% of women in urban slum area were illiterate. 24.2 % and 52.2% women in rural and urban area respectively had more than 4 children. (Table 1)

Distribution of beneficiaries according to breast feeding practices after recent pregnancy shown in Table 2. Colostrum was not given to babies in almost 45 percent in urban slum and 20 percent in rural areas & this difference was statistically significant. A total of 47 percent in urban slum & 34 percent babies in rural were given prelacteal feeds in the form of honey, water, sugar syrup etc. But these practices were not found to be different statistically. Highly significant difference was noticed for initiation of breast feeding after one hour of delivery among urban slum (45.7%) & rural mothers (25.9%). Exclusive breast feeding that is only breast milk for 6 months was followed by 65% of mothers in urban slum areas, on the contrary statistically significant difference was observed in rural areas as 86% of mothers followed the same.

Table1: Socio demographic characteristics of mothers in rural and urban slums.

Sociodemographic factors		Rural		Urban slum	
		N=58	%	N=46	%
Age	21-30 yrs	57	**98.3**	36	**78.3**
	31-40yrs	1	1.7	10	21.7
Age at marriage	<18 yrs	**11**	**19.0**	**13**	**28.3**
	18-20 yrs	42	72.4	25	54.3
	>20 yrs	5	8.6	8	17.4
Education	Illiterate	8	**13.8**	13	**28.3**
	Primary school	2	3.4	8	17.4
	Secondary school	31	**53.4**	16	**34.8**
	SSC	12	20.7	2	4.3
	HSC	2	3.4	4	8.7
	Graduate	3	5.2	3	6.5
No of children	Less than 2	13	22.4	**4**	8.7
	2 to 4	31	53.4	18	39.1
	More than 4	14	**24.2**	24	**52.2**

Table 2: Distribution of beneficiaries according to breast feeding practices after recent pregnancy in rural and urban slum.

Breast feeding practices in recent pregnancy					
Was colostrum given	Rural		Urban slum		p-value
	N	%	N	%	
YES	46	79.3	25	54.3	0.006
NO	12	20.7	21	**45.7**	
Total	58	100	46	100	
Were prelacteals feeds given					
YES	20	**34.5**	22	**47.8**	0.08
NO	38	65.5	24	52.2	
Initiation of breast feeding					
Less than 1 hour	43	74.1	25	54.3	0.01
More than 1 hour	15	**25.9**	21	**45.7**	
Duration of exclusive breast feeding*	**N=51**		**N =43**		
Less than 6 month	7	13.8	15	**34.9**	0.007
6 month	44	86.2	28	65.1	

***Those mothers who had children less than 6 months of age were not considered for calculation.**

DISCUSSION:

Purpose and benefits of breast feeding has been stressed all over the world by various health organizations and community-based programs and approaches. The present study was carried out to compare urban slum and rural areas to know which had better breast feeding practices. Rural area appeared better in all the aspects of breast feeding than urban slum area. However, breast feeding practices were still suboptimal in both the areas.

Practice of giving colostrum to babies was observed significantly higher in rural (79.3%) than urban slum (54.3%) areas. This finding is comparable to other studies, [7,8] on the contrary a study in rural areas of Uttarpradesh [9] showed only 11.8% of woman gave colostrums to their babies. In our study, surprisingly rural counterparts were better in this practice in comparison to the urban slum areas.

India being a traditional country has supported the importance of breastfeeding practices since ancient times. However, many social and cultural factors still prevail in our society that compels the mothers to disrespect such practices. In our study a total of 47 percent in urban slum and 34 percent babies in rural area were given prelacteals feeds in the form of honey, water, sugar syrup etc. Most mothers (57%) gave their last-born child something to drink other than breast milk in the three days after delivery. The most common prelacteal liquid is milk other than breast milk. Providing the infant with pre-lacteal feeds is a custom practised in most of the rural sections of India. Other common prelacteal liquids are honey sugar or glucose water, and plain water. Similar findings were observed by SMV Kumari et al & Ashwini S .[8,10] It is believed that prelacteal feeds act as laxatives in clearing the meconium. Sadly, the mothers are not aware that the pre-lacteal feeds that could be a source of contamination. [11]

The WHO recommends that breastfeeding be initiated within 1 hour of birth. Early initiation of breastfeeding provides benefits for both the baby and the mother. Any delay in the initiation of the breastfeeding postpones the development of the oxytocin reflex, as a consequence interferes with the uterine contractions and development of breast reflex. Data on the initiation of breastfeed are quite variable all over India, while NFHS- 4 data show that only 41.6% of mothers had initiated breastfeeding within one hour after birth, [12] in the present study significantly higher proportion of rural mothers initiated breastfeeding within one hour than urban slum mothers (74.1% vs 54.3%). This could be explained by the fact that rural mothers prefer normal delivery more than caesarean sections. The skin to skin contact between the mother and newborn shortly after birth, not only helps in early initiation of breastfeeding, but also enhances the probability of exclusive breastfeeding as well maintaining the duration of it. These significant benefits of skin to skin contact cannot be valued by mothers after caesarean sections as many movements are restricted.

Exclusive breast feeding that is only breast milk for 6 months was not followed by almost 35 percent of mothers in urban slum area, whereas it was strikingly significantly better in rural areas i.e 86%. Our study findings were in line with the findings of SMV Kumari et al [10]wherein, exclusive breastfeeding for 6 months in infants above 6 months of age is better in rural area (60.6%) than in urban slum area (47.6%). %). In developing country like ours, women have joined various workstations in public and private sectors for their and families benefits. The 1961 Maternity benefit Act provides maternity leave for 12 weeks (3 months) and two mandatory nursing breaks of limited time during working hours. However, the benefits of this Act are experienced by a very few mothers, acting as a barrier in exclusive breast feeding upto 6 months of infants life.[13]

According to Yadav Y.S, 293 (58.6%) rural and 370 (74%) urban mothers had given exclusive breast feeding till 6 months of age.[7] According to NFHS 4 data, only 55 % of babies are able to exclusively breastfed for the first six months. [12]

CONCLUSION:

Present study revealed that various inappropriate breast feeding practices are prevalent in both urban and rural areas though rural mothers had more favorable practices compared to urban slum mothers. Inadequate knowledge of these practices has major effects on the child's health and development. Thus, to combat these issues pertaining to inappropriate breast feeding practices, various appropriate educational interventions should be promoted by the family, community and the health care system to educate the mothers and thereby reduce the morbidity and mortality in children.

REFERENCES:

1. Iskandar, M.B., Costello, C., Nasution, Y. (1990). Initiation and Duration of Breast feeding in Indonesia. Asia Pac Popul J, 5, 89–112.
2. Bautista, L.E. (1997). Factors associated with initiation of breast feeding in the domician Republic. Rev Panam Salud Publica, 1, 200–207.
3. Breastfeeding lancet Series 2016, India's Road Map.
4. Garg, M., Marriyah, H., Deeksha, K. (2015). Infant and Young Child Feeding (IYCF) practices in Udupi district, Karnataka. Journal of Nutrition Research, 1, 38-44.
5. Gupta, A., Dadhich J. P., Faridi, M. M. A. (2010). Breastfeeding and complementary feeding as a public health intervention for child survival in India. The Indian Journal of Pediatrics, 4, 413-418.
6. Qiu, L., Zhao, Y., Binns, C. W., Lee, A. H., & Xie, X. (2009). Initiation of breastfeeding and prevalence of exclusive breastfeeding at hospital discharge in urban, suburban and rural areas of Zhejiang China. International Breastfeeding Journal, 4(1), 1.
7. Yadav, Y. S., Yadav, S., Rathi, S., Dhaneria, M., Singh, P. (2015). Comparison of Infant feeding practices among rural and urban mothers: an observational study. International Journal of Medical Research and Review, 3(6), 547-553.
8. Ashwini, S., Katti, S. M., Mallapur, M. D. (2014). Comparison of breast feeding practices among urban and rural mothers: A cross-sectional study. International Journal of Medicine and Public Health, 4(1), 120-124.
9. Bhardwaj, N., Hasan, Badrul S., Mohammad, Z. (1991). Breast-Feeding and Weaning Practices- A Rural Study in Uttar Pradesh. The Journal of Family Welfare, 39(1), 23-29.
10. Kumari, S.M.V., Murlidhar, K. (2015). A study on breast feeding practices in rural and urban Warangal, Andhra Pradesh. MRIMS Journal of Health sciences, 3(1), 73-75.
11. Deshpande, J.D., Giri, P.A., Phalke, D.B., Phalke, V.D., Kalakoti, P., Syed, M.M. (2010). Socio-cultural practices in relation to breastfeeding, weaning and child rearing among Indian mothers and assessment of nutritional status of children under five in rural India. AMJ, 3, 618-24.
12. National Family Health Survey – 4. (2015-2016). International Institute for Population Sciences.
13. Maternity benefit act 1961, Ministry of labour.