

Volume 4, Issue 4,

Jul-Sep 2015, www.ijfans.com

e-ISSN: 2320-7876

INTERNATIONAL JOURNAL OF FOOD AND NUTRITIONAL SCIENCES

IMPACT FACTOR ~ 1.021





INTERNATIONAL JOURNAL OF FOOD AND NUTRITIONAL SCIENCES

e-ISSN 2320 –7876 www.ijfans.com Vol.4, Iss.4, Jul-sep, 2015 All Rights Reserved

Research Paper

Open Access

ROLE OF ELDER/FACILITATING NON-LACTATING WOMEN IN PROMOTION OF OPTIMAL INFANT AND YOUNG CHILD FEEDING PRACTICES

Dinesh Kumar, N.K Goel and Meenu Kalia^{*}

Dept of Community Medicine, GMC, Chandigarh

*Corresponding author: meenusharma75@gmail.com

Received on: 31st July, 2015

Accepted on: 5th October, 2015

ABSTRACT

Malnutrition is regarded as a silent emergency in India, seriously affecting human development and economy of the country. Majority of infant deaths can be averted by promoting proper breast-feeding practices. Objective: To explore opinions of elder and other non lactating women in the family regarding IYCF and their role in promotion of IYCF. Qualitative survey was conducted among women to explore their opinions regarding breastfeeding. Among 157 women surveyed, 150 (95.5%) knew the importance of breastfeeding for infants, 60 (38.2%) respondents were of the opinion that breastfeeding was very healthy and easy to digest for infants. There were 72 (45.8%) women in favour of initiating breastfeeding immediately after birth and 106 (67.5%) respondents were of the opinion that Exclusive Breastfeeding (EBF) should be practiced till 6 months. Knowledge of women (other than lactating women) regarding infant feeding practices and nutrition needs of children should be imparted as they play major role in promotion of optimal IYCF. Their poor knowledge regarding IYCF may endanger efforts to improve nutritional status of children as they are in the leading role of decision makers as well as facilitators to bridge the gaps existing between knowledge and actual practices by mothers. Efforts to include grandmothers and senior women in infant and young child feeding

Key words: Complementary Feeding (CF); Colostrum Feeding; Exclusive Infant and Young Child Feeding Practices (IYCF); Malnutrition; Prelacteal Feeds.

INTRODUCTION

Proper nutrition of children leading to adequate growth and good health is the essential foundation of human development. Child malnutrition tremendously affects development outcomes. The prevention of malnutrition is crucial for improving our human resources. Child under-nutrition is the major public health issue in many developing countries such as India. Out of 167 million underweight under-five-year old children in the world, 90 million live in South Asia (Nutrition and Poverty, 1997). Malnutrition is regarded as a silent emergency in India, seriously affecting human development and economy of the country. India has the highest proportion of undernourished children in the world (Status of Infant and Young Child Feeding, 2003). The Global Strategy for Infant and Young Child Feeding was adopted at the 55th World Health Assembly in May 2002, and the UNICEF executive board adopted the strategy in September 2002, bringing a unique global consensus on issues related to optimal infant and young child feeding and sets out targets for improving child survival through enhancing optimal infant and young child feeding (Status of Infant and Young Child Feeding, 2003).

Optimal infant and young child feeding implies that every child gets the best possible start to life through exclusive breastfeeding for the first six months (starting within one hour of birth) and continued breastfeeding for two years or beyond, along with adequate and appropriate complementary feeding beginning after six months (WHO/UNICEF, 2003). Mothers have little information about nutrition, exclusive breastfeeding, complementary feeding. According to National Family Health Survey (NFHS-3) report (2006-07), about 50% children less than six months of age are exclusively breastfed; only 53% children below three years of age were given timely complementary feeding at age 6-8 months. Also, most mothers (57%) gave their last born child something to drink other than breast milk in the three days after delivery. World Health Report (2005) recommends a preventive approach and also recognizes that more than two-thirds of child deaths are related to poor infant feeding practices.

Majority of infant deaths can be averted promoting proper breast-feeding practices. Certain social factors are responsible for prevailing under-nutrition like customs, misbelieves, taboos etc. Some socio-cultural



beliefs/barriers and misconceptions restrict mothers from utilizing their knowledge regarding infant feeding practices in actual practice. Lack of knowledge and practice regarding optimal infant and young child feeding (IYCF) might also be a reason for this. It constitutes a major component of child caring practices apart from socio-cultural, economic and demographic factors. Promotion of Optimal IYCF practices is essential for attaining and maintaining proper nutrition, health, and development of children and should be considered a key priority for child survival strategy (Gupta, 2006). Need for educating mothers for promotion of proper infant-feeding practices and other aspects of childcare has also been felt in several other studies (Kumar et.al., 2006, Jeeson and Richard, 1989, Kumar et.al., 1989, Swami et.al., 2002, Caufiled et.al., 1999, Sachdev et.al., 1991 and Narayanan et.al., 1984). This consensus is also reflected in the MDG report, where optimal infant and young child feeding is included among the priority interventions. Somehow, IYCF component showing lot of regional variations remain one of the most neglected determinants of young child malnutrition in India in spite of its important role in growth pattern of children. IYCF Practices adopted by women is not only influenced by their personal knowledge but also of other non lactating women usually elder/experienced having familial close relationships with them playing role of decision makers as well as facilitators. Across cultures, grandmothers are involved in advising and care giving related to multiple aspects of infant and child nutrition, namely: breastfeeding initiation, techniques, and duration; colostrum; prelacteal feeding; during illnesses; timing and types feeding of complementary foods; and diet of pregnant and breastfeeding mothers. Certain social factors are responsible for prevailing under-nutrition among children like customs, wrong beliefs taboos etc. Some sociocultural beliefs/barriers and misconceptions restrict mothers from utilizing their knowledge regarding infant feeding practices in actual practice. Results of studies (Kumar et.al., 2006, Hop et.al., 2000, Victora et.al., 1989, WHO, 2000, Diaz et.al., 1995, Eckhardt et.al., 2005 and Bloss et.al., 2004) on IYCF have indicated that inappropriate feeding practices can have profound consequences for the growth, development, and survival of infants and children, particularly in developing countries.

Therefore, it is important to explore opinions of women not only of lactating women but also of other women regarding IYCF for planning strategies of improving nutritional status of children. Present qualitative study aims at exploring opinions of those other women regarding IYCF.

MATERIAL AND METHODS

STUDY UNITS

Qualitative survey was conducted among 157 elder women playing direct /indirect role of facilitators in the families of selected mothers of infants within selected clusters of Chandigarh who were willing to participate in the study.

STUDY DESIGN

In qualitative survey, views of elder women regarding IYCF in terms of early initiation of breast feeding, colostrums feeding, exclusive breast feeding, timely complimentary feeding, and proper dietary practices for children etc. was investigated.

DATA COLLECTION TOOLS

Information regarding IYCF practices: initiation of breastfeeding, feeding of colostrum, exclusive breastfeeding (EBF) up to 6 months, complementary feeding, feeding of colostrums, etc. was collected from the elderly ladies in the selected households.

Respondents were interviewed in privacy to collect the desired information House-to-house survey was conducted for this purpose. Field problems faced during data collection were solved time to time.

TERMINOLOGY

EXCLUSIVE BREASTFEEDING RATE

Proportion of infants exclusively breastfed for first six months as suggested by WHO.

COMPLEMENTARY FEEDING RATE

Proportion of infants aged 6-9 months who receive both breast milk and solid or semi-solid food as suggested by WHO.

RESULTS

A Qualitative Survey was conducted among 157 women. Out of them, 150(95.5%) knew the importance of Breastfeeding for Infants. There were 60 (38.2%) respondents who were of the opinion that breastfeeding was healthy and easy to digest Regarding importance of breastfeeding, 32 (20.3%) women expressed breastfeeding as a combination of nutrients and it's a complete diet for baby. 35 (22.2%) told that it prevents the baby from diseases and increases immunity.

There were 72 (45.8%) women who were of the opinion that breast feeding should be started immediately after birth as it is very important and nutritious for baby 45(28.6%). 61 (38.8%) respondents were in favour of giving customary liquids before initiating Breast Feeding. Almost all women were in favour of feeding colostrums to babies. Also, 73 (46.4%) preferred to give honey as a prelacteal feed and 96 (61.1%) were of the opinion that if customary pre lacteal feed was not given nothing would happen. Honey come out to be the most preferred pre lacteal feed by 73 (46.4%) respondents. Among all women, 106 (67.5%) respondents were in favour of EBF till 6 months and 78 (49.6%) thought that breast feeding may be continued with other liquids after 6 months. There were 19 (12.1%) respondents reporting help in domestic work to provide support to breast feeding mothers and 77(49.0%) provided dietary care to lactating mothers, 47

The article can be downloaded from http://www.ijfans.com/currentissue.html



Г

ROLE OF ELDER/FACILITATING NON-LACTATING WOMEN IN PROMOTION OF OPTIMAL INFANT AND YOUNG CHILD FEEDING PRACTICES

(29.9%) provides special food items to feeding mothers like Panjeeri, Dry fruits, Khichdi, Brown Rice, Non-Veg. After 6 months 100 (63.6%) advised to start complementary feeding. Items of complementary feeding included: Daal water: 60, (38.2%) Daliya 42 (26.7%), Mashed items like banana, roti, biscuits, rice 38 (24.2%). Need for education regarding breastfeeding was felt by 119 (75.7%) respondents. Out of which 82 (68.9%) wanted to receive this knowledge through doctor. Out of total 157 respondents, 114 (72.6%) were willing to act as facilitators to promote breastfeeding practices.

Table 1: opinions of women regarding IYCF

Opinion N=157	No	%		
Importance of breast feeding to infant (n=157)				
Yes	150	95.5		
No Response	07	4.4		
Perceived benefits of breastfeeding for an infant (n=157)				
Very healthy and easy to digest	60	38.2		
Combination of nutrients and complete diet for baby	32	20.3		
Prevent from diseases and increase immunity	35	22.2		
Helps in to gain weight and gives power to baby	12	7.6		
Don't know	18	11.4		
Idle time to initiate breastfeeding (n=157)				
Immediately after birth	72	45.8		
Within 1 hour	34	21.6		
After 6 hour	03	1.9		
Within 2-3 hour	17	10.8		
As per child need	02	1.2		
After one day	09	1.7		
After two-three days	06	3.8		
Don't know	14	8.9		
Justifications for timing of initiation of breastfeeding (n=157)				
Baby feels hungry	22	14.0		
Very important and nutritious for baby	45	28.6		
Doctor advise for this	17	10.8		
Prevent from diseases	29	18.4		
Because colostrums present in first milk	04	2.5		
Don't know	33	21.0		
No response	07	4.4		
Desired duration of Exclusive Breast Feeding without water (n=157)				
Till 6 months	106	67.5		
Till 5 months	28	17.8		
Till 3 months	11	7.0		
At least 1 year	02	1.2		
For 2 years	03	1.9		
Don't know	07	4.4		
With water				
After 6 months	87	55.4		
After 7 months	23	14.6		
Within 3-5 months	28	17.8		

Dinesh Kumar, N.K Goel and Meenu Kalia

After 1 year	06	3.8
Don't know	13	8.2
With other Liquids		
After 6 months	78	49.6
After 3-5 months	28	17.8
After 8 months	10	6.3
After 1 year	5	3.1
After 2 year	3	1.9
Don't know	33	21.0
Kind of support given to lactating moth	ners (n=1	
All types of support related to any thing	16	10.1
Helps in domestic work	19	12.1
Mental and physical support	4	2.5
Dietary care provided to mother	77	49.0
Proper health check up	08	5.0
Special items (panjeeri, dry fruits	47	29.9
,khichdi, brown rice, non veg etc) given		
to mother		
Special guidance related to	2	1.2
breastfeeding practices given to mother		
Opinion related to not giving pre-lactea	l feed (n	=157)
Nothing will happen	96	61.1
Creates problem in breast feeding	02	1.2
Creates problem in baby voice	03	1.9
Don't know	19	12.1
No Response	37	4.4
Age, when complementary feeding show	uld be st	tarted
(n= 157)		
After 6 months	100	63.6
After 5 months	01	0.6
After 3 months	4	2.5
After 4 months	4	2.5
After 8 months	8	5.0
After 1 years	15	9.5
After 2 years	1	
	1	0.6
Don't know	1 24	0.6 15.2
Don't know	24	15.2
Don't know Perceived need of latest knowledge	24	
Don't know Perceived need of latest knowledg breastfeeding (n=157)	24 ge rega	15.2 arding
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes	24 ge rega 119	15.2 arding 75.7
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say	24 ge rega 119 12	15.2 arding 75.7 7.6
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No	24 ge rega 119 12 18	15.2 arding 75.7 7.6 11.4
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response	24 ge rega 119 12 18 8	15.2 arding 75.7 7.6 11.4 5.0
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response If yes, from whom this knowledge s	24 ge rega 119 12 18 8	15.2 arding 75.7 7.6 11.4 5.0
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response If yes, from whom this knowledge s imparted(n-119)	24 ge rega 119 12 18 8	15.2 arding 75.7 7.6 11.4 5.0 e
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response If yes, from whom this knowledge s	24 ge rega 119 12 18 8 should b 82	15.2 arding 75.7 7.6 11.4 5.0 e 68.9
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response If yes, from whom this knowledge s imparted(n-119) Doctor Nurses	24 ge rega 119 12 18 8 should b	15.2 arding 75.7 7.6 11.4 5.0 e
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response If yes, from whom this knowledge s imparted(n-119) Doctor Nurses Elder family member	24 ge rega 119 12 18 8 should b 82 29	15.2 arding 75.7 7.6 11.4 5.0 e 68.9 24.3
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response If yes, from whom this knowledge s imparted(n-119) Doctor Nurses	24 ge rega 119 12 18 8 should b 82 29 09	15.2 ording 75.7 7.6 11.4 5.0 e 68.9 24.3 7.5 8.4
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response If yes, from whom this knowledge s imparted(n-119) Doctor Nurses Elder family member Professional qualified person Mother	24 ge rega 119 12 18 8 should b 82 29 09 10 15	15.2 irding 75.7 7.6 11.4 5.0 e 68.9 24.3 7.5 8.4 12.6
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response If yes, from whom this knowledge s imparted(n-119) Doctor Nurses Elder family member Professional qualified person Mother Health staff	24 ge rega 119 12 18 8 should b 82 29 09 10	15.2 ording 75.7 7.6 11.4 5.0 e 68.9 24.3 7.5 8.4
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response If yes, from whom this knowledge s imparted(n-119) Doctor Nurses Elder family member Professional qualified person Mother Health staff Counselor	24 ge rega 119 12 18 8 should b 82 29 09 10 15 18	15.2 ording 75.7 7.6 11.4 5.0 e 68.9 24.3 7.5 8.4 12.6 15.1 4.2
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response If yes, from whom this knowledge s imparted(n-119) Doctor Nurses Elder family member Professional qualified person Mother Health staff Counselor	24 ge rega 119 12 18 8 should b 82 29 09 10 15 18 5	15.2 ording 75.7 7.6 11.4 5.0 e 68.9 24.3 7.5 8.4 12.6 15.1 4.2
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response If yes, from whom this knowledge s imparted(n-119) Doctor Nurses Elder family member Professional qualified person Mother Health staff Counselor Like to receive any latest info	24 ge rega 119 12 18 8 should b 82 29 09 10 15 18 5	15.2 ording 75.7 7.6 11.4 5.0 e 68.9 24.3 7.5 8.4 12.6 15.1 4.2
Don't know Perceived need of latest knowledg breastfeeding (n=157) Yes Can't say No No response If yes, from whom this knowledge s imparted(n-119) Doctor Nurses Elder family member Professional qualified person Mother Health staff Counselor Like to receive any latest info breastfeeding (n-157)	24 ge rega 119 12 18 8 should b 82 29 09 10 15 18 5 ormation	15.2 rrding 75.7 7.6 11.4 5.0 e 68.9 24.3 7.5 8.4 12.6 15.1 4.2 h on

The article can be downloaded from http://www.ijfans.com/currentissue.html

Can't say	3	1.9		
No response	6	3.8		
Willing to act as facillitator to promote breastfeeding practices (n-157)				
Yes	114	72.6		
No	34	21.6		
No response/not sure	9	5.7		

DISCUSSION

WHO and UNICEF recognize well the importance of breast feeding on maternal and child health. Thus, there is a need for promotion and protection of optimal infant feeding practices for improving nutritional status of children. In India, the practice of breastfeeding is almost universal, but initiation of breastfeeding is generally quite late and colostrums is discarded (Khan, 1990). In our study, almost all women (95.5%) were aware of the importance of breast feeding. Only 60(38.2%) mother in laws opined that breast milk is very healthy and easy to digest and 72(45.8%) told that breast feeding should be started immediately after birth as it is very important and nutritious for baby. 61(38.8%) respondents preferred to give prelacteal feeds and honey as a prelacteal feed was the most common choice of about 50% women. Dongra, Deshmukh, Rawool and Garg (2010) mentioned that In India the practice of breastfeeding is almost universal, but initiation of breastfeeding is generally quite late and colostrums is discarded. The study by Kumar et al (2006) on Influence of Infant-feeding Practices on Nutritional Status of Under-five Children observed that in urban slums of Allahabad, initiation of breastfeeding within six hours and proper complementary feeding to be only 30.6% and 38.7% respectively and 54.8% mothers discarded colostrums.

In another study by Kumar et al (2006) prelacteal feeding was found to be 40% in Slum of Chandigarh. This study also found only 159 (58.9%) mothers initiating breast feeding within six hours of birth and colostrums was discarded only by 43 (15.9%) respondents. Prelacteal feeds were given by 40.0% mothers. Roy, Das Gupta and Pal (2009) studied feeding practices of children in Urban Slum of Kolkata and observed that about 29% children received prelacteal feed and about 41% of mothers were aware of exclusive breast feeding. Feeding of colostrums was reported by 90% mothers. Exclusive breast feeding was only 28.3%. About 77% received breast milk within 24 hours. Khokhar et al (2003) found exclusive breast feeding by 35.2% mothers in Urban Slums of Delhi, while prelacteal feeding was about 36.1% in an Urban Community of Mumbai as reported by Kulkarni, Anjenaya and Gujar (2004).

Majority of surveyed women wanted to receive knowledge regarding IYCF mainly from doctors. In a study conducted by Chaudhary (2011), none of the mothers got any advice regarding breast feeding during ANC visits.

Certain social factors are responsible for prevailing under-nutrition like customs, misbeliefs, taboos

etc. Some socio-cultural beliefs/barriers and misconceptions restrict mothers from utilizing their knowledge regarding infant feeding practices in actual practice. Lack of knowledge and practice regarding optimal infant and young child feeding (IYCF) might also be a reason for this. An important point to emphasize, however, is that while grandmothers or senior women may be advising women about the nutrition and health needs of their children, their advice is not always optimal, and in several cases (e.g., provision of prelactal feeds and water, and disposal of colostrum) is significantly detrimental to the health. Therefore, any efforts to include grandmothers and senior women in infant and young child feeding programs must ensure that the health and nutrition practices that are promoted by them are optimal. It is therefore desired that those women playing an important role in decision making and practices adopted by by lactating women should also be made part of optimal IYCF promotional activities and other Nuritional Educational Programs. Conclusions and Suggestions Knowledge to women (other than lactating women) regarding infant feeding practices and nutrition needs of children should be should be imparted as they play major role in promotion of optimal IYCF. Their poor knowledge regarding IYCF may endanger efforts to improve nutritional status of children as they are in the leading role of decision makers as well as facilitators to bridge the gaps existing between knowledge and actual practices by mothers. Efforts to include grandmothers and senior women in infant and young child feeding

ACKNOWLEDGEMENTS

The study is based on part of findings of a project "Infant and Young Child Feeding and Other Correlates of Anthropometric Failures among Children in Chandigarh" sponsored by Department of Science and Technology (DST), Chandigarh Administration. Authors acknowledge the grant received from DST.

REFERENCES

- Nutrition and Poverty. Papers from the ACC/SCN, 24th Session Symposium, Kathmandu, March 1997.
- Status of Infant and Young Child Feeding, Delhi, Breastfeeding Promotion Network of India (BPNI), 2003.
- Status of Infant and Young Child Feeding, Delhi, Breastfeeding Promotion Network of India (BPNI), 2003.
- The Global Strategy for Infant and Young Child Feeding, WHO/UNICEF, 2003.)
- National Family and Health survey 2006-07, International Institute for Population Sciences, Mumbai, India, ORC Macro, Maryland, USA, October 2000.



- UN Millennium Project 2005' Who's Got Power? Transforming Health Systems for Women and Children', summary version report of the Task Force Child Health and Maternal Health, p 8, New York, US.
- Gupta. Infant and Young Child Feeding An 'Optimal' Approach, Economic and Political Weekly, August 26, 2006.
- Kumar D, Agarwal N, Swami HM. Sociodemographic correlates of breast-feeding in urban slums of Chandigarh. Indian J Med Sci 2006; 60:461-466.
- Jeeson UC, Richard J. Factors influencing breastfeeding behavior. Indian Pediatr 1989; 26: 997-1002.
- Kumar S, Nath LM, Reddaiah VP. Factors influencing prevalence of breastfeeding in a resettlement colony of New Delhi. Indian J Pediatr 1989; 56:385-91.
- Swami HM, Bhatia V, Bhatia SPS. Breast-feeding practices in peri-urban community of Chandigarh, Indian J. Prev. & Soc. Med., Vol. 33, No. 1&2, 2002.
- Caulfield LE, Huffman SI, Piwoz EG. Intervention to improve intake of complementary foods by infant 6-12 months of age in developing countries. Impact on growth and on the prevalence of malnutrition and potential contribution to child survival. Food Nutr Bull 1999; 20:183-200.
- 13. Sachdev HPS, Krishna J, Puri RK, Satyanarayana L, Kumar S. Water supplementation in exclusively breastfed infants during summer in the tropics. Lancet 1991; 337(8747): 929-933.
- Narayanan I., Prakash K., Murthy N. S., Gujral V. V. Randomised controlled trial of effect of raw and holder pasteurised human milk and of formula supplements on incidence of neonatal infection. Lancet 1984; ii: 1111-1113.
- Kumar D, Goel NK, Mittal PC, Misra P. Influence of infant-feeding practices on nutritional status of under-five children. Indian J Pediatr 2006; 73:417-21.
- Hop LT, Gross R, Giay T, Sastroamidjojo S, Schultink W, Lang NT. Premature complementary feeding is associated with poorer growth of Vietnamese children. J Nutr 2000; 130:2683-90.
- Victora CG, Smith PG, Vaughan PJ et al. Infant feeding and deaths due to diarrhea. A case-control study. Am J Epidemiol 1989; 129:1032-41.
- WHO Collaborative Study Team. Effect of breastfeeding on infant and child mortality due to infectious diseases in less developed countries: a pooled analysis. Lancet.2000; 355:451-55.

- Diaz S, Herreros C, Aravena R, Casado ME, Reyes MV, Schiappacasse V. Breast-feeding duration and growth of fully breastfed infants in a poor urban Chilean population . Am J Clin Nutr 1995;62:371-6.
- Eckhardt CL, Suchindran C, Gordon- Larsen P, Adair LS. The association between diet and height in the post infancy period changes with age and socioeconomic status in Filipino youths. J Nutr 2005;135:2192-8.
- Bloss E, Wainaina F, Bailey BC. Prevalence and predictors of under-weight, stunting and wasting among children aged 5 and under in Western Kenya. J Trop Pediatr 2004;50:260-70.
- Khan ME. Breastfeeding and weaning practices in India. Asia Pac Population J 1990;5:71-88.
- AR Dongra, PR Deshmukh, AP Rawool , BS Garg (2010)Where and How Breastfeeding Promotion Initiatives Should Focus Its Attention? A Study form Rural Wardha Indian Journal of Community Medicine Apr Jun 2010/Vol 35/ Issue 2.
- Dinesh Kumar, N.K. Goel, Poonam C. Mittal and Purnima Misra. Influence of Infant-feeding Practices on Nutritional Status of Under-five Children. Indian J Pediatr; 2006 May;73(5):417-21.
- Kumar D, Agarwal N Swami HM. Socio-demographic correlates of breast-feeding practices in urban slums of Chandigarh. *Indian J Med Sci* 2006; 60: 461-466.
- Sima Roy, Aparajita Dasgupta, Bobby Pal, Feeding Practices of Children in an Urban Slum of Kolkata, Indian Journal of Community Medicine, Oct-Dec 2009/Vol. 34 (4) P 362-363.
- Khokhar A, Singh S, Talwar R, Rasania SK, Badhan SR, Mehra M. A study of malnutrition among children aged 6 months to 2 years from a resettlement colony of Delhi. Indian J Med Sci 2003;57:286-9
- Kulkarni RN, Anjenaya S, Gujar R. Breast feeding practices in an Urban Community of Kalamboli, Navi Mumbai. Indian J Community Med 2004;29:179-80.
- Chaudhry R N, Shah T, Raja S. Knowledge and practice of mothers regarding breast feeding: a hospital based study. Health Renaissance 2011; 9(3): 194-200.