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KNOWLEDGE OF INFANT FEEDING IN SLUM AND URBAN AREA OF AGRA DISTRICT

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ABSTRACT

Childhood is the crucial period of life span. The nutrition provided in this period affects the overall growth and development of child. Breastfeeding is the safest, least allergic infant feeding method. It has nutritional, immunological,

behavioural and economic benefits and also provides desirable mother infant bonding.

The current study was designed to explore the Knowledge of mothers towards infant feeding. This study was

carried out in slum and urban area of Agra District. 200 mothers were selected from Agra district. 100 samples belonged to

slum area and 100 samples belonged to urban area respectively. An "Interview Schedule" was used to collect all necessary

information regarding the knowledge of mothers on infant feeding. The data was collected, tabulated and analysed.

Majority of slum and urban mothers agreed that breast milk is the best food for new born and mother of slum and urban

area know that colostrum is first breast milk, 52.5. % believed that they should not feed the child when child has diarrhoea.

KEYWORDS: Infant Feeding, Knowledge, Exclusive Breast Feeding, Supplementary Feeding, Colostrum

INTRODUCTION

Breastfeeding is one of the most important determinants of child survival, birth spacing and prevention of

childhood infection. The beneficial effects of breastfeeding depend on the initiation of breastfeeding, its duration and the

age at which the breastfed child is weaned. All infants should be fed exclusively on breast milk from birth to six month of

age, and thereafter, while receiving appropriate and adequate complementary food, breastfeeding should continue up to

two years of age or beyond.

BPNI suggest that infant aged (0-5) months who are not breastfed have seven fold and five-fold increased risk of

death from diarrhea compared with infants who are exclusively breastfed. At the same age, non-exclusive breastfeeding

result in more than two fold increased risk of dying from diarrhea. Infant age 6-11 month who are not breast fed also have

an increased risk of such death.

MATERIAL AND METHOD

The present study was conducted to observe the knowledge, regarding infant feeding among the mother belonging

to Slum and Urban Area in Agra. The total sample size was 200, 100 from selected slum and 100 from urban which was

calculated using the appropriate formula of the sample size calculation at the 95% confidence interval, 50% proportion and

5% of margin of error. Two stage cluster sampling was used for present work. In first phase we have identified slum and

urban area as cluster and in second phase of the study the first household was selected randomly. An "Interview Schedule"

was used to collect all necessary information regarding the knowledge of mothers on infant feeding.

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Before administering the interview schedule on a larger population, a pilot study was carried out on 30 subjects in order to assess their effectiveness. Further, the schedule was sensitive in selecting the exact information and was found to be valid, selected tools are found suitable and reliable for the present study. Validity and reliability was found to be 0.7% and 0.8% respectively. So schedule was found suitable for the present study. After collecting the required information from the subjects, the schedules were coded numerically and data were classified into simple and complex tables. The data was analysed by applying-percentage, mean, test of significance (Students t-test) and chi-square for drawing the conclusion.

RESULTS AND DISCUSSIONS

Area Wise Distribution of Mothers According to Demographic Variables

The distribution according to demographic variables like age of mother, religion of mothers, religion of mother, type of family, education, occupation of mother, type of food and sex of infant. The result has been illustrated in table no. 1 and figure no. 1 and 2.

Out of total 200 mothers, majority of them 60.5% belonged to 18-25 years age group, followed by 29.5% belonging to age group of 26-30 years and remaining 10.0% belonged to 31-35 years age group. Among the mothers of slum areas 70.0% belonged to 18-25 years age group, followed by 26.0% belonging to age group of 26-30 years and remaining 4.0% belonged to 31-35 years age group respectively. Among the mothers of urban areas 51.0% belonged to 18-25 years age group, followed by 33.0% belonging to age group of 26-30 years and remaining 16.0% belonged to 31-35 years age group.

46.5% mothers had higher secondary education, 34.5% were illiterate and remaining 15.0% had primary education and 3.5% had secondary education. Majority of mothers in slum area i.e. 64.0% were illiterate, 24.0% had primary education and remaining 9.0% had higher secondary education and 3.0% had secondary education. Among the mother of urban area majority of them i.e. 84.0% had higher secondary education, 6.0% had primary education, remaining 5.0% had secondary education and 5.0% were illiterate.

Significant association was observed between education of mother with the mothers of slum and urban areas.

Area Wise Distribution of Mothers According to Knowledge about Infant Feeding

20 questions were asked from the each respondent like best food for new born, what is colostrum, best method of feeding, how long exclusive breast milk can be given etc. The result has been illustrated in table no. 2 and 3 and figure no. 3 and 4.

No significant association was observed between best foods for new born with the mothers of slum and urban areas. Similar findings were also reported by Balakrishna and Hussain (2000), that majority (86%) of mother agreed that breast milk was best for their infants. Alverz (2007), Bridges (2007) observed that human milk is the best source of protein for infants and ideal food for human babies. Mc Allister, Helen (2009) observed that breast milk is the best food for babies. Piper Kirstin M. E. (2007) observed that human milk is widely accepted to be the optimal source for nutrition for the new born infants, containing all the protein, lipid, carbohydrates, micronutrient and trace elements required for growth development and immune protection.

Significant association was observed between why colostrum is needed for the baby with the mothers of urban and slum areas. Significant association was observed between how long the exclusive breast milk can be given with the mothers of slum and urban area. Balkrishnan and Hussain (2000) reported that about 95% of mothers were found to breast feed their infants at least once or twice a day, only 18% breast fed fully upto three months and 9% upto 6 months. Ross Catherine (2009) observed that infants are exclusively breastfed for 6 months. Forde July (2010) observed that infants are exclusively breastfed until 6 months of age as it is a recommended source of nutrition for the first 6 months of an infant's life.

Significant association was observed between starting breast feeding with mother belonging to slum and urban area. Lording Ros (2010) observed that colostrum was ingested during the first day of life by exclusive breast feeding for healthy new born infants. Seth and Ghai (2001) reported that breast feeding was universally started in all new born. Bhandari and Patel (2003) in their survey reported that new born were given first milk from 1st -6th day of birth.

Significant association was observed between how long breast feeding should be continued with the mothers of slum and urban areas. No significant association was observed between the interval for each breastfeeding with the mothers of slum and urban areas.

Significant association was observed between the stage of starting supplementary feeding with the mothers of slum and urban areas. Ray et.al. (1993) reported that timely supplementary feeding was neglected and was offered to 54.5% of infants only. Gupta et.al. (2001) observed in their study conducted in Gwalior, India that practice of introduction of semi-solid and solid was late. Anderson, Joy Melley (2009) observed that there is currently agreement in different countries regarding the recommended timing for the introduction to solids as no earlier than 4 months of age.

No significant association was observed between how many times supplementary feeding can be given during day time with the mothers of slum and urban areas. Significant association was observed between what type of nutrition is best for lactating mother with the mothers of slum and urban areas.

Table 1: Area Wise Distribution of Mothers According to Demographic Variables (N=200)

S. No	Parameters	Category	No. & %	Slum (100)	Urban (100)	Total (200)	Chi-Square
		18-25	Number	70	51	121	
		years	Percent	70.0	51.0	60.5	
		26-30	Number	26	33	59	
1	Age of	years	Percent	26.0	33.0	29.5	
1	mother	31-35	Number	4	16	20	
		years	Percent	4.0	16.0	10.0	
		36 and	Number	0	0	0	
		above	Percent	0.0	0.0	0.0	
	Education of mother	Illiterate	Number	64	5	69	120.75 (5)
			Percent	64.0	5.0	34.5	
		Primary	Number	24	6	30	
			Percent	24.0	6.0	15.0	
2		Secondary	Number	3	5	7	120.75 (S), p<0.05
			Percent	3.0	5.0	3.5	p<0.03
		Higher	Number	9	84	93	
		secondary	Percent	9.0	84.0	46.5	

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Table 2: Area Wise Distribution of Mother According to Knowledge about Breast Feeding (N=200)

S. No	Parameters	Category	Slum (100)	Slum %	Urban (100)	Slum %	Total (200)	Total %	Chi-Square
	Best food for new born	Breast milk	93	93.0	98	98.0	191	95.5	2.29 (NS), p>0.05
1		Cow's Milk	7	7.0	2	2.0	9	4.5	
	Why colostrum is needed for baby	To maintain immunity	62	62.0	85	85.0	147	73.5	14.02 (S), p<0.05
2		To promote growth of the baby	25	25.0	10	10.0	35	17.5	
	oaoy	As a food	8	8.0	4	4.0	12	6.0	
		Since baby demands it	5	5.0	1	1.0	6	3.0	
	How long the exclusive breast milk can be given	First 6 month	53	53.0	81	81.0	134	67.0	19.72 (S), p<0.05
3		First 2-3 month	12	12.0	8	8.0	20	10.0	
		First 8 month	18	18.0	4	4.0	22	11.0	
		Upto 1 year	17	17.0	7	7.0	24	12.0	
	When to start breastfeeding	After 30 minutes	44	44.0	84	84.0	128	64.0	
		After 5-6 hours	10	10.0	3	3.0	13	6.5	46 22 (5)
4		2-3 hours after delivery	6	6.0	9	3.0	15	7.5	46.32 (S), p<0.05
		After one day	40	40.0	4	4.0	44	22.0	
_	How long breastfeeding should be continued	Upto 1 year	9	9.0	11	11.0	20	10.0	
5		1-1.5year	14	14.0	12	12.0	26	13.0	53.094 (S),
3		1.5-2 year	14	14.0	59	59.0	73	36.5	p<0.05
		>2 years	63	63.0	18	18.0	81	40.5	

Table 3: Area wise Distribution of Mothers Based on Knowledge about Breast Feeding and Supplementary Feeding (N=200)

S. No	Parameters	Category	Slum (100)	Slum %	Urban (100)	Urban %	Total (200)	Total %	Chi-Square
	T . 10	5-10 min.	13	13.0	10	10.0	23	11.5	
1	Interval for each	10-15 min.	9	9.0	12	12.0	21	10.5	2.13 (NS),
1		20-30 min.	35	35.0	28	12.0	63	31.5	p>0.05
	breastfeeding	30-50 min.	43	43.0	50	50.0	93	46.5	
2	Stage of starting supplementary feeding	After 3 months	15	15.0	3	3.0	18	9.0	
		After 6 months	60	60.0	94	94.0	154	77.0	33.40 (S), p<0.05
		After 1 year	16	16.0	3	3.0	19	9.5	_
		After 2 year	9	9.0	0	0.0	9	4.5	
3	Day time supplementary feeding can be	4-6 times	54	54.0	56	56.0	110	55.0	7.20 (NG)
		2-3 times	12	12.0	31	31.0	43	21.5	7.29 (NS),
		5-7 times	21	21.0	13	13.0	34	17.0	p>0.05

	given Table 3: Contd.,								
		6-8 times	13	13.0	0	0	13	6.5	
4	Best nutrition for lactating mother	Did not know	57	57.0	7	7.0	64	32.0	
		Protein rich diet	18	18.0	12	12.0	30	15.0	
		Iron rich food	4	4.0	17	17.0	21	10.0	71.34 (S),
		Calorie rich food	8	8.0	15	15.0	23	11.5	p<0.05
		Calcium rich food	13	13.0	49	49.0	62	31.0	

Area Wise Distribution of Mother According To Demographic Variables

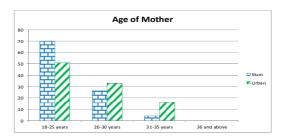


Figure 1: Area Wise Distribution of Mother According to their Age (N=200)

Figure 1 illustrates the distribution of mothers in slum and urban area according to their age. Maximum respondents were in the age group of 18-25 years.

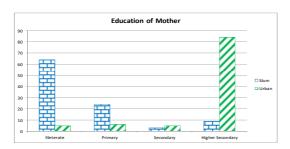


Figure 2: Area Wise Distribution of Mother According to their Education (N=200)

Figure 2 illustrates the distribution of mothers in slum and urban area of Agra according to their education. Majority of respondents in urban area had received higher secondary education where as maximum respondents in slum area were illiterate.

Area Wise Distribution of Mother According to Knowledge about Breast Feeding

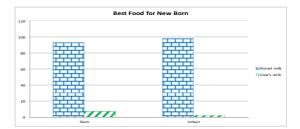


Figure 3: Area Wise Distribution of Mother According to Best Food for New Born (N=200)

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Figure 3 illustrates distribution of mothers according to the question which is the best food for new born. Majority of mothers in slum and urban area were of the belief that mother's milk is the best food for the new born.

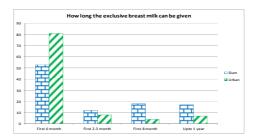


Figure 4: Area Wise Distribution of Mother According to how long the Exclusive Breast Milk can be Given (N=200)

Figure 4 illustrates the distribution of mothers according to their outlook on the duration of exclusive breast feeding. Majority of mothers in slum as well as urban area were aware that exclusive breast feeding should be carried on for 6 months.

CONCLUSIONS

Thus it can be concluded from the results that 67.0% mothers knew that exclusive breast milk should be given till first six month, while 12.0% said it should be given upto 1 year while remaining 11.0% and 10.0% said exclusive breast milk can be given for first 8 month and first 2-3 months respectively. 95.5% said that breast milk is the best food for new born.

REFERENCES

- 1. Alverz B (2007), Bridges (2007): Milk as a best source of protein, Food and Nutrition, New Delhi, 40, 67-73.
- 2. Anderson, Joy Melly (2009): Age of introducing weaning food A.B. Publication, New York, 24, 64-79, 903-906.
- 3. Balakrishna S. and Hussain (2000): Breast feeding in Kelantan Med. Jr. of Malaysia, 32, 22-24.
- 4. Bhandari and Patel (2003): Dietary and feeding habit of infant in various socio-economic groups Indian Paediatrics, 10, 233-238.
- 5. Binns et al (2006): Exclusive Breastfeeding for first six months, Arts Publisher, 7-10.
- 6. Forde M. (2010): Milk as a source of nutrition, journal of Acoustical Society of America, 30 (3), 75-80.
- 7. Government of India Commitment (2013): "Enhancing Optimal Infant and Young Child Feeding Practices". National Rural Health Mission (NRHM) guidelines 2013; Ministry of Health and Family Welfare.
- 8. Gupta et.al. (2001): Duration of breast feeding in rural and urban mothers, Indian Paediatrics, 18, 325-335.
- 9. Joseph N. et al (2013): infant feeding practices in south India: A longitudinal study. J Fam Med Primary Care 2013; 2:37-43
- 10. Jha D.N. (2013): Breastfeeding: World's most effective, inexpensive life-saver. TNN Aug/3/2013.

- 11. Joseph N. et al (2013): infant feeding practices in south India: A longitudinal study. J Fam Med Primary Care 2013; 2:37-43
- 12. Lording Ros (2010): Association between socio-economic status and breast feeding duration, America Publisher, America, 48-57.
- 13. Mc Allister, Helen (2009): The National health and medical research council on breast feeding, 54 (3), 41-47.
- 14. Ray et.al. (1993): Time of weaning, Indian Pediatrics, 80-87.
- 15. Ross Catherine (2009): effect of ebf, C.R. Publicatiob, New York, 105=111.
- 16. Pant I. and Chothia K. (2002): Springer Link –Journal Article. http://www.springerlink.com/content/833776v837m53505
- 17. Piper Kirstin M. E. (2007): Nutritional Status of Breast milk, Chandra Publication, Chennai, 32, 34-40.
- 18. Webster, M (1985): Webster's nith new collegiate dictionary. Meriam-Webster Inc.
- 19. West Bengal: Infant and young child feeding practice in Bankura District.
- 20. Yadla V.L. et al (1999-2000): Reference book for UGC National Eligibility Test-JRF/Lectureship, Bibliography and Literature Survey, Review the literature, page no.218, Kalyani Publishers.