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Knowledge regarding low cost complementary feeding for infants among mothers

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Abstract

A study to assess knowledge regarding low cost complementary feeding for infants among others in selected urban slums of Pune city” was undertaken by the researcher.

Objectives of the Study: To assess knowledge regarding low cost complementary feeding for infant among mothers and to associate the finding with the demographic variables.

Material & Methods: The data was collected from 300 mothers having infant.

Results: The study revealed that the majority of the mothers (76.3%) have average knowledge regarding low cost complementary feeding for infants (s d= 3.6) followed by 14% and 9.7% of mothers having poor and good knowledge respectively. There was statistically significant association between age of mother, religion, and employment status, number of children and birth order of infant with the knowledge score of the mothers.

Conclusion: The study concludes that there is average knowledge of the mothers regarding low cost complementary feeding for infants.

Keywords: Complementary feeds, infants, mothers

Introduction

After 6 months of age infant’s nutritional needs are increased this cannot be completed by breast milk alone. Thus after six months infant needs to be introduce with new food in addition to breast milk. Mothers milk known as complementary feeding is the key to prevent under nutrition as recommended by the United Nations International Child Emergency Fund, UNICEF (2016) [2].

The Assocham-EY report (2017) states that India contributes to maximum (50%) malnourished children in the world. While there is reduction of stunted under-five children from 48% in 2005-06 to 39% in 2015 there is slight increase in wasted children from 19.8% to 21%. Rural areas have higher underweight children as compared to urban areas. Very low percentage around 10% of 6-23months by age are fed adequately. In India consuming non-nutritious, non- balanced food or consuming food deficient in micronutrients contributes to nutrient deficiency. In addition to this there is unavailability of nutrient rich foods in the market which is formulated specially for the children [2].

Adequate complementary feeding during the infancy period is of prime importance in early growth and development years of infancy. The infants should be fed with complementary feeding to boost their immunity and prevent them from various illnesses.

The young child and infant guideline recommends that only breast feeding for the child for six months which must be continued up to two years. This will protect the children from malnourishment in early years of life. Under nutrition is detrimental and often leads to mortality and morbidity [3].

Multiple factors like illiterate female, poverty, lack of knowledge on infant nutrition and improper health access are the major contributor of malnutrition among the infants population. A low cost nutritious food for the infants, which comes under the vulnerable groups, has been considered by the board of food and nutrition of the Ministry of child and women Development. The board has worked out a booklet of low cost recipes for complementary feeding for infants which will help in prevention of under nutrition [4].

Methodology

A non-experimental descriptive study design was adopted to conduct the study among 300 mothers of selected urban slums of Pune city with non-probability purposive sampling technique. The inclusion criteria for the study were mothers of infants between 4-12 months of age

Results

Table 1: Frequency Distribution of participants as per Demographic Variables.

Sr. No.	Demographic variables	Frequency(f)	Percentage (%)
1	Age		
	20 and below	30	10.0
	21-30	210	70.0
	31-40	60	20.0
2	Religion		
	Hindu	223	74.3
	Muslim	55	18.3
	Christian	21	7.0
	Others	1	0.3
3	Employment status		
	Employed	80	26.7
	Unemployed	220	73.3
4	Type of family		
	Joint	195	65.0
	Nuclear	80	26.7
	Extended	25	8.3
5	No. of children		
	1	84	28.0
	2	138	46.0
	3	68	22.7
	More than 3	10	3.3
6	Birth order of the infant		
	First	84	28.0
	Second	138	46.0
	Third	68	22.7
	fourth & above	10	3.3
7	Education		
	Primary	91	30.3
	Secondary & Higher Secondary	143	47.7
	Graduate	60	20.0
	Post-Graduate	6	2.0
8	Monthly income		
	10000 and below	90	30.0
	10001-20000	143	47.7
	20001-30000	58	19.3
	30001 above	9	3.0

Table 1 depicts that Maximum 70.0% of the subjects were from the age group 21-30 years of age. Majority of the samples 74.3% followed Hindu religion. Maximum 73.3% mothers were unemployed and 65.0% lived in joint family. Majority of the mothers, 46.0% had 2 children with 46.0% of infant second by their birth order. As per the education level, maximum mothers 47.7% have completed secondary and higher secondary education. Majority of the family income 47.7% ranges from 10001-20000 rupees.

Table 2: Mean Knowledge score and Standard Deviation of mothers regarding low cost complementary feeding for infants.

Variable	n	Minimum	Maximum	Mean	Std. Deviation
Knowledge Scores	300	6	23	13.9	3.6

Table 2 depicts the knowledge scores of 300 samples ranging from minimum 6 and maximum scores reported is 23. The average reported score $\mu=13.9$, with $SD= 3.6$.

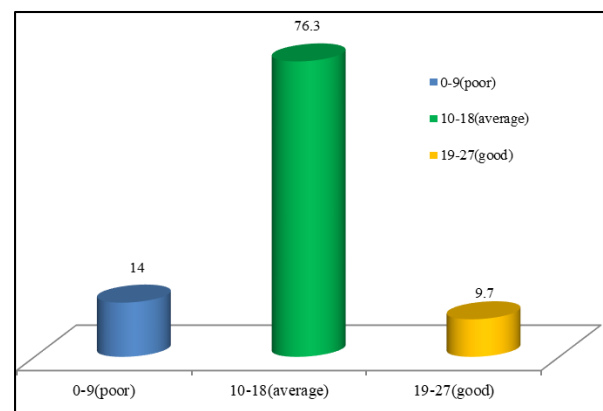


Fig 1: Description of the knowledge scores obtained by subjects regarding low cost complementary feeding n=300

The data from the figure depicts that Good scores ranging from 19 to 27 is scored by 9.7% (29) mothers, 76.3% (229) mothers attained Average score and 14% [42] mothers are in the Poor category.

Table 14: Association of demographic variables with knowledge score of mothers regarding low cost complementary feeding for infants n=300

Demographic variables	Knowledge			F	Chi-square/ Fisher's Exact test value	df	p Value	Inference
	Poor	Average	Good					
Age					$\chi = 10.801$	4	0.029	Associated
20 and below	0	25	5	30				
21-30	0	192	18	210				
31-40	14	40	6	60				
Religion					F=17.365	6	0.004	Associated
Hindu	21	179	23	223				
Muslim	13	37	21	55				
Christian	8	12	1	21				
Others	0	1	0	1				
Employment status					9.295	2	0.01	Associated
Employed	14	66	1	80				
Unemployed	28	164	28	220				
Type of family					$\chi = 2.172$	4	0.709	Not associated
Joint	30	148	17	195				
Nuclear	10	60	10	80				
Extended	2	21	2	25				
No. of children					$\chi = 19.070$	6	0.006	Associated
1	0	75	9	84				
2	18	112	8	138				
3	17	40	11	68				

More than 3	2	7	1	10				
Birth order of the infant								
First	5	70	9	84	$\chi = 19.070$	6	0.006	Associated
Second	18	112	8	138				
Third	17	40	11	68				
fourth & above	2	7	1	10				
Education								
Primary	18	64	9	91	$\chi = 8.852$	6	0.175	Not associated
Secondary & Higher Secondary	15	111	17	143				
Graduate	7	50	3	60				
Post-Graduate	2	4	0	6				
Monthly income								
10000 and below	14	71	5	90	$\chi = 8.233$	6	0.217	Not associated
10001-20000	15	111	17	143				
20001-30000	10	41	7	58				
30001 above	3	6	0	9				

*association at 0.05 level of significance

The chi-square calculated knowledge value is greater than chi-square table value, there is statistically association of knowledge with the demographic variables, age, religion, employment status, number of children and birth order of the infant at 0.05 level of significance.

Discussion

The discussion of the study was based on the results achieved after the analysis of collected data. It is described in the view of the objective of the current study. Maximum mothers 70% belongs to age group 21-30 years. The study finding was supported by the study which was conducted by Ram Hari Chapagain which assess the knowledge and practice of mother of infant and young child on complementary feeding where majority of the mothers 80.36% ages belong group of 21-30 years [21].

Greater number of mothers 74.3% followed Hindu religion. The study finding was supported by the study which was conducted by Anurag Chaturvedi *et al.* on determinants of micronutrient fortified blended food (Balbhog) consumption. The findings of the study revealed that maximum 90.4% followed Hindu religion [18].

Most of the mothers 73.3% were unemployed. A Comparable study, Canaan Negash *et al.* studied on caretakers knowledge, practices on diet and state of nutrition of the young children in Hula, Ethopia, where maximum mothers 67.0% were housewife [22].

Maximum, 65% of mothers lived as joint family. S. Rao *et al.* conducted a study on complementary feeding at Coastal South India, it was found out that maximum 52% lived a joint family. This showed consistency with the present study [23].

Majority mothers 46% have 2 children and order of birth, 46% as second child. KP Kandel *et al.* study on factors affecting complementary feeding among mother’s revealed maximum 58.30% mothers having child of 2 and less with second as birth order [24].

In education, majority 47.7% of the mothers have completed secondary and higher secondary education. Similarly another study by Mary Katepa-Bwalya *et al.* on IYCF practices and state of nutrition in 2 districts of Zambia it was found that majority of the mothers in Manzabuka and Kafue have completed primary (50.6%, 67%) and secondary (38%, 23%) education respectively [25].

Maximum, 47.7% mothers have monthly income of rupees 10001-20000. KP Kandel *et al.* study on factors affecting complementary feeding among mothers found that maximum 51.2% have family income more or equal to 15000 rupees [24].

In present study, out of 300 mothers, the highest knowledge score obtained was average (10-18) score by 229(76.3%) mothers followed by poor (0-9) score, 42 (14.0%) and good [19, 27] 29 (9.7%) mothers.

Similarly, study on attitude, knowledge and mothers practices regarding complementary feeding. It was found that 59% mothers provide commercial complementary feed and tea crackers. 75.4% mothers believe in selecting various food items from different food groups. 45.7% mothers opted to provide both homemade and commercial feeds. 91% mothers did not add extra ghee, oil or butter to the feed [11].

Anuraag Chaturvedi *et al.* studied on Balbhog consumption and its determinants among children through the integrated child development services where 88.6% were aware and avail benefit of the fortified food. The population regularly consumed Balbhog which are available free of cost and the taste was found acceptable to the children which lead to increase in the consumption of Balbhog [11].

Conclusion

From the findings of the present study and similar with other study it can be concluded that there is average or poor knowledge among the mother of infants on low cost complementary feeding. Demographic variables considering age of mother, employment status, and religion, number of children and birth order of children have been statistically associated with knowledge score of the mother.

References

- Code I, Substitutes B, Breastfeeding G, Initiative A. We’re building a new UNICEF. Org, 2019.
- Assocham. India has largest number of malnourished children in the world. Live Mint [Internet], 2017, 1-14. Available from: <https://www.livemint.com/Politics/OIdNvn30nqdrGQC6pARu3J/India-has-largest-number-of-malnourished-children-in-the-wor.html>
- Tiwari S. Infant and Young Child Feeding Guidelines, 2016 Satish Tiwari, Ketan Bharadva, Balraj Yadav, Sushma Malik, Prashant Gangal, Cr Banapurmath, Zeeba Zaka-Ur-Rab, Urmila Deshmukh, Visheshkumar And Rk Agrawal, For The Iycf Chapter Of Iap. Indian Pediatr. 2016; 703(15):703-13.
- Government of India. Nutritious Recipes for Complementary Feeding of Infants and Young [Internet]. Food and Nutrition Board Government of India, 2008, 1-68. Available from:

- <http://wcd.nic.in/sites/default/files/Nutritious%2BRecipes%2BEnglish%2BFina.pdf>
5. Van Liere MJ, Frega R, Tariton D, Schofield D. Infant and Young Child Nutrition: Paper 1 Improving Complementary Feeding: Assessing Public and Private Sector Business Models [Internet], 2015. Available from: http://www.gainhealth.org/wp-content/uploads/2015/03/WhitePaper1_final_smaller.pdf
 6. Turck D. History of food diversification History of complementary feeding. *Pediatr Arch* [Internet]. 2010; 17(5):191-4. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0929693X10709258>.
 7. World Health Organization. Nutrition. Complementary feeding [Internet], 2015, 11-3. Available from: http://www.who.int/nutrition/topics/complementary_feeding/en/
 8. Bazaz RN. Development and Quality Evaluation of Low Cost Weaning Formulations from Locally Available Food Materials [Internet]. University of Kashmir, 2016. Available from: <http://shodhganga.inflibnet.ac.in/handle/10603/192728>
 9. Brar N kaur. Share this Page. Jaypee digital. 2015. 696-670 p.
 10. Dubewar S, Ahmed S, Tambe SH, Chavan A. Infant and young child feeding guidelines: awareness amongst mothers and practices followed. *Int. J Contemp Pediatr*. 2018; 5(2):629.
 11. Shazia Samad Mohsin, Abdul Sattar Shaikh, Rehana Shaikh, Nighat Haider, Arit Parkash. Knowledge Attitude and Practices of Mothers regarding Complementary Feeding. *J Dow Uni Heal Sci*. 2014; 8(1):21-5.
 12. Karmacharya C, Cunningham K, Choufani J, Kadiyala S. Grandmothers' knowledge positively influences maternal knowledge and infant and young child feeding practices. *Public Health Nutr*. 2017; 20(12):2114-23.
 13. Sethi RK, Padhy S, Raju DVSLN. 514-2131-2-Pb. 2017; 4(2):394-8.
 14. Trivedi B, Vyas S, Dave B, Desai K. Complementary feeding practices among mothers of Waghodia Taluka of Vadodara: a knowledge, attitude, and practice study. *Int. J Med Sci Public Heal*. 2015; 4(5):647.
 15. Shivcharan Singh Gandhar. Effectiveness of Cartoon Movies as Distracter on Pain among Children Undergoing Venipuncture. *International Journal of Science and Research*, 2016, 5(6).
 16. Shivcharan Singh Gandhar. A study to assess the knowledge regarding early signs of myocardial infarction among the adults in selected urban areas of Pune city. *International Journal of Advance Research in Nursing*, 2018, 1(1).
 17. Manikam L, Ahmed S, Prasad A, Robinson A, Dharmaratnam A, Lakhanpaul M *et al*. Systematic review of infant and young child complementary feeding practices in South Asian families: the India perspective. *Public Health Nutr*. 2017; 21(04):637-54.
 18. S Kavitha, C Nadiya DRP. Ginal article DY of Complementary feeding practices among mothers of infants to one year. 5(2):29-35. Available from: https://www.researchgate.net/publication/282007309_Study_of_Complementary_feeding_practices_among_mothers_of_infants_aged_six_months_to_one_year
 19. Mesfin A, Henry C, Girma M, Whiting SJ. Use of pulse crops in complementary feeding of 6-23-month-old infants and young children in Taba Kebele, Damot Gale District, Southern Ethiopia. *J Public Health Africa*. 2016; 6(1):1-12.
 20. Anuraag Chaturvedi, N Nakkeeran, Minal Doshi, Ruchi Patel, Sadhana Bhagwat. Determinants of Micronutrient Fortified Blended Food (Balbhog) Consumption among Children 6-35 Months of Age Provided through the Integrated Child Development Services Program in Gujarat, India. *Indian J Community Med* [Internet]. 2018; 43(2):97-101. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5974843/>