

A Comparative Study to Assess the Knowledge, Attitude and Knowledge on Practices Regarding Complementary Foods among Mothers of Infants between Urban and Rural Areas, At Tirupathi, Chittoor (Dist.), India

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Abstract:

Background: India with a population of 1.21 billion population stand at the second position as the most populous country in the world after China. India comprises almost 13.1% of child population aged 0-6 years. The present study was designed to assess the knowledge, attitude and knowledge on practices regarding complementary foods among mothers of infants between urban and rural areas at, Tirupati

Methodology: The data were collected on knowledge, attitude and knowledge on practices among mothers of infants. Sample size was 100 mothers of infants. Convenient sampling technique was used to draw the sample. The data collection was done by interview method, us structured questionnaire which includes 25 questions of knowledge, attitude and knowledge on practices with scoring pattern of one for each correct answer and zero for incorrect response

Results: The results of the study were indicating about that among 50 urban mothers 15 (30%) had inadequate knowledge, 19 (38%) had moderate knowledge and 16 (32%) had adequate knowledge on complementary foods. Among 50 rural mothers 21 (42%) had inadequate knowledge, 23(46%) had moderate knowledge and 6(12%) had adequate knowledge on complementary foods.

Conclusions: There is lack of knowledge in mothers regarding complementary foods, there has to be proper recommendation about timing of complementary foods. Mean age of complementary foods was delayed due to improper information, low socio-economics status and rural mothers, thus leading to malnutrition of the child. Hence, mothers should be educated properly regarding complementary foods, preparation and practices to prevent malnutrition and improve the health status of the children

Key Words: knowledge, attitude, practices.

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I. Introduction:

India with a population of 1.21 billion population stand at the second position as the most populous country in the world after China. India comprises almost 13.1% of child population aged 0-6 years. Children of today are tomorrow's citizens; hence it is very necessary to provide better health care facilities to them. India accounted almost 43% underweight children against 32% in Pakistan¹.

Infants are the most sensitive and vulnerable section of the population. Infants show a higher rate of mortality among all other indicator of child survival. The rate of reduction in infant mortality rate calculated by the compound annual growth rate (CAGR) is -0.03% at the national level. The states like Madhya Pradesh 54% and Assam 54% have the highest number of infant deaths in the country. The states of Uttar Pradesh 50%, Rajasthan 47%, Bihar 42%, Haryana 41%, Andhra Pradesh 39%, have Infant mortality rate (IMR) above the national average 40% per thousand live births in 2013. Kerala 12% has the least number of IMR followed by Tamil nadu 21%².

The word "weaning" is derived from Anglo-Saxon word "Wenian" means to be accustomed to something different. The concept of "weaning" has now changed to "complementary feeding" for the simple reason that, with the introduction of the other nutritious, food, breast feeding needs to be continue for a period of 2 years³.

An infant grows rapidly in the first year of his life. Hence, his energy requirements are very high, ICMR recommends an intake of 120cals/kg body weight in the first six months, and 100cals/kg body weight in the next six months. Rapid growth also demands higher intake of protein. Simple easily digestible protein,

ideally supplied through breast milk, is recommended. The ICMR has recommended a protein intake of 2.3-1.8g/kg body weight in the first six months and 1.8-1.5g/kg body weight in the next six months⁴.

A critical period of child growth is in the first 2-3 years of life when growth faltering is common and exclusive breast feeding in the first six months, and appropriate complementary feeding after 6 months, are essential to meet the nutritional needs of the growing child. In addition to lack to assess due to limited availability and affordability of a diverse diet, traditional home-prepared complementary foods in many contexts are either too viscous or watered down, monotonous, and have low energy and micronutrient density and poor protein quality⁵

II. Materials And Methods:

Study area: the study was conducted at urban and rural areas at Tirupati and it is 100 mothers of infants from urban and rural areas Tirupati.

Ethical consideration and clearance:

Ethical clearance and permission was obtained from Municipal Corporation and Primary Health Center. Each participant was notified about the purpose of study, the right to refuse for participation in the study.

III. Methodology:

The Convenient sampling was carried out at urban and rural areas, Tirupati, India to assess the knowledge, attitude and knowledge on practices on complementary foods among mothers of infants. The convenient sampling technique was adapted while selecting the subjects to meet the study objectives. Data was collected by using a structured questionnaire as a tool to assess the knowledge, attitude and knowledge on practices on complementary foods among mothers of infants. Informed consent was obtained from all the mothers, who were interviewed.

Inclusion and Exclusion Criteria:

Mothers having infants the age of 6-12 months. Mothers who are willing to participant in the study. Mothers who can understand and speak Telugu. Mothers whose children are sick. Mothers who are taking treatment for psychiatric conditions

Socio-demographic profile of the respondents:

Socio-economic factors such as family income, educational status of parents, occupation of parents etc. And socio-demographic factors such as Age of the mother in years, Age of the infant, Gender of the baby, Religion, Type of the family, Order of the infant in the family, Weight of infant in Kgs, Residence, Type of diet, Do you have home garden at home, Source of information on complementary foods

Assessment of knowledge, attitude and knowledge on practices:

Scoring key was prepared for section-I by coding the socio demographic data. In section-II part-A and part-C each correct answer has a score of "1" and wrong answer core of "0" (zero). Thus with maximum score is 10 were allotted to knowledge mothers on complementary feeding and score of 10 were allotted to hygiene feeding practice of mothers. A five point Likert rating scale (5, 4, 3, 2, 1) was used and the response were categorized as strongly agree, agree, undecided, disagree, and strongly disagree.

Data Analysis: The collected data was coded, tabulated and analysed by using descriptive statistics (mean, standard deviation) and inferential statistics (chi-square) to find out the association between demographic variables and attitude score. The total score was calculated and was analysed by using statistical package for social sciences (SPSS) version 13.0

IV. Results:

Socio-demographic data

Out of 50 mothers of urban area, majority 26(52%) were aged 19-24 years and 1 (2%) were aged less than 18 years. With regard to age of the infant, majority 27(54%) were aged 7-9 months and 1 (2%) was 10-12 months. Pertaining to gender 27 (54%) were male infants and 23 (46%) were female infants. Related to family income, majority 24(48%) were having family income of Rs 30001-50,000/- rupees and 2(4%) were having family income less than Rs 30,000/-. In relation to order of infant in the family, majority 36 (72%) was 1st child and 1 (2%) was 3rd child. Out of 50 mothers of rural area, majority 35(70%) were aged 19-24 years and 2 (4%) were aged 29 years above. With regard to age of the infant, majority 29(58%) were aged 7-9 months and 2 (4%) were aged 10-12 months. Pertaining to gender, majority 26(52%) were female and 24(48%) were male infants. Related to family income, majority 33(66%) were having family income of Rs30001-50,000/- and 7(14%) were having family income less than Rs 30,000/.. In relation to order of infant in the family, majority 25 (50%) was 1st child and 1 (2%) was 4th child.

Table: 1 Distribution of level of knowledge, attitude and knowledge on practices regarding complementary foods among mothers of infants of urban and rural areas

Residence	Knowledge					
	Inadequate		Moderate		Adequate	
	n	%	n	%	n	%
Urban	15	30.0	19	38.0	16	32.0
Rural	21	42.0	23	46.0	6	12.0
Total	36	36.0	42	42.0	22	22.0

Table-1 shows that among 50 urban mothers 15 (30%) had inadequate knowledge, 19 (38%) had moderate knowledge and 16 (32%) had adequate knowledge on complementary foods. Among 50 rural mothers 21 (42%) had inadequate knowledge, 23(46%) had moderate knowledge and 6(12%) had adequate knowledge on complementary foods.

Table: 2 Distribution of level of attitude regarding complementary foods among mothers of infants of urban and rural areas.

Residence	Attitude					
	Low Attitude		Moderate Attitude		High Attitude	
	N	%	n	%	n	%
Urban	13	26.0	20	40.0	17	34.0
Rural	7	14.0	29	58.0	14	28.0
Total	20	20.0	49	49.0	31	31.0

Table-2 shows that among 50 urban mothers 13 (26%) had low attitude, 20(40%) had moderate attitude and 17(34%) had high attitude regarding complementary foods. Among 50 rural mothers 7 (14%) had low attitude, 29(58%) had moderate attitude and 14 (28%) had high attitude regarding on complementary foods.

Table: 3 Distribution of level of knowledge on practices regarding complementary foods among mothers of infants of urban and rural areas.

Residence	Knowledge on Practices					
	Inadequate		Moderate		Adequate	
	N	%	n	%	n	%
Urban	21	42.0	20	40.0	9	18.0
Rural	14	28.0	29	58.0	7	14.0
Total	35	35.0	57	57.0	8	8.0

Table-3 shows that among 50 urban mothers 21 (42%) had inadequate practice, 20 (40%) had moderate practice and 9 (18%) had adequate practice. Among 50 rural mothers 14(28%) had inadequate practice, 29 (58%) had moderate practice and 7 (14%) had adequate practice.

Association between level of knowledge, attitude and knowledge on practices and selected demographic variables:

There is association between level of knowledge regarding complementary foods among mothers of infants of urban and rural areas like age of mother, age of infant and type of diet significant at p-value is <0.01 level. There is association between level of attitude regarding complementary foods among mothers of infants of urban and rural areas like education of mother, order of infant and weight of infant significant at p-value is <0.01 level. There is a association between level of knowledge on practices regarding complementary foods among mothers of infant of urban and rural areas like religion, family income per annum and type of diet significant at p-value is <0.001 level.

V. Discussion:

Nutritional deficiency and mal nutrition is worldwide problem with the highest prevalence in developing countries. It is found especially among women of child bearing age and during pregnancy, Lactation due to improper weaning diet. Due to traditions and customs in society of rural areas mothers are not giving weaning diet to infant properly. These are signs that an infant is mature enough to begin learning to eat from a spoon. Introduction of complementary foods from a spoon is developmentally important for both breastfed and formula-fed infants to learn appropriate feeding skills for childhood⁶.

However, an infant’s weight or age alone does not determine readiness for complementary foods; each infant develops at his or her own rate. As an infant’s oral skills develop, the thickness and lumpiness of foods can gradually be increased. The texture of foods can progress from pureed to ground to fork-mashed and eventually to dice. Commercially prepared infant foods that progress in texture can also be purchased. Infants should only be given foods that are appropriate for their developmental age

The present study mainly concentrates on knowledge, attitude and knowledge on practices regarding complementary foods among mothers of infants. The present statement is “A comparative study to assess the knowledge, attitude and knowledge on practices regarding complementary foods among mothers of infants between urban and rural areas, at Tirupathi”.

Comparison between urban and rural mothers determined by using ‘t’ test, that Mean 6.54, 18.90, 7.80 and standard deviation 1.775, 1.753, 1.030 were obtained in the urban mothers knowledge, attitude and knowledge on practices respectively. Mean 5.76, 19.06, 8.34 and standard deviation 1.533, 1.994, 1.673, were obtained in the rural mothers knowledge, attitude and knowledge on practices respectively. There is a significant difference between urban and rural knowledge and knowledge on practices at p-value is 0.05 level.

VI. Conclusion:

Based on the findings of this study, it may concluded that most of the urban mothers 19 (38) had moderate knowledge, 20 (40%) had moderate attitude and 21 (42%) had inadequate knowledge on practices about complementary foods. In rural mothers 23 (46%) had moderate knowledge, 29 (58%) had moderate attitude and 29 (58%) had moderate knowledge on practices about complementary foods. The socio-demographic factors includes; age of the infant, religion, education of father, occupation of father, type of family, order of infant in the family and home garden are effecting factors for complementary foods. Hence health promotion interventions are required to improve complementary feeding and hygienic practices. Community-based health education programs mother’s knowledge and also decreased malnutrition related deaths.

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