



ISSN (E): 2277-7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2023; 12(6): 4063-4065  
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Received: 11-04-2023

Accepted: 18-05-2023

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## Knowledge of rural women about food and nutrition requirements of infants

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### Abstract

The study entitled, "Knowledge of Rural Women about Food and Nutrition Requirements of Infants" was conducted in Mansi Block of Khagaria District of Bihar. Ex-post facto design of research was used in the study. A sample of 100 women respondents were chosen using simple random method to collect the data. An interview schedule was prepared to collect the data and the data were collected through personal interview. The findings of the study indicated that 71 percent of the respondents had medium level of knowledge of food and nutrition requirements of infants followed by 15 percent of the respondents having high knowledge on the matter. Only 14 percent of the respondents had low knowledge of food and nutrition requirements of infants. The table pertaining to relationship between Socio-economic status of the respondents and their knowledge regarding food and nutrition requirements of infants showed that age, caste, education, social participation, mass media exposure and increasing sequence of infant were positively correlated with knowledge of women at 1 percent level of significance. The regression analysis of the data showed that among 11 Socio-economic variables, the variables of age, social participation, mass media exposure and annual income of the respondents were positively related to knowledge level of respondents at 1 percent.

**Keywords:** rural women, infants, food, nutrition, knowledge

### Introduction

Knowledge is an important and pivotal component of human behaviour which is associated with awareness building in a person and given the awareness, a man can act as catalyst to change her/his family, society and nation as a whole. While talking about women, knowledge of women brings positive change in overall household atmosphere and all dimensions of family life. And of all dimensions of family life, proper intake of food and nutrition is the necessity of each and every family member to develop a healthy body and mind. Especially, the first six years of life of a child are vital for her/his mental development in particular along with physical development. Proper intake of food and nutrition starts in a child's life just after her/his birth. The period of infancy is an important milestone in a child's life which is the period from birth to the age of 12 months.

During infancy, inadequate nutrition can lead to restricted growth, low body weight, impaired cognitive and physical development and even death. Ensuring that the child gets adequate nutrition will help her/him achieve maximum cognitive, physical and emotional growth and development. Adequate nutrient supply is vital to maintain healthy physical and mental growth and long-term health. When babies grow, they are fed the correct types and qualities of food so that their health is improved. The caregiver's constructive and encouraging feeding behaviour and strategies help infants develop healthy behaviour towards food. A complete demand for infant nutrition includes essential substances which promote normal growth, function, development and resistance to infection and diseases.

A mother who understands nutrition and is familiar with dietary requirements during pregnancy and lactation, it reduces many nutrition and health related problems in children. One of the several causes for prevalence of malnutrition among children has been attributed to mother's ignorance and lack of adequate knowledge and information.

At the same time, food is the basic substance which is related to human survival, hence a proper knowledge of food and nutrition requirements of child is imperative for a mother. Recognizing that nutrition education is critical to the progress of programmes to increase mother's and child's health and well-being, the Food and Agriculture Organization (FAO) has extended nutrition education related programmes in a variety of countries along with the countries of United Nations International Children's Emergency Fund (UNICEF).

In several nations, UNICEF supported supplementary feeding services have acted as the basis for nutrition education in primary schools and populations. Several national nutrition programmes have been launched with the aim of enhancing the nutritional status of the disadvantaged groups of people along with improving the knowledge base of women in this area.

Besides all these, there is a vast gap between literacy level of men and women in India. This hampers the basic growth and development of the child at the stage when it is most important. Hence, it was found imperative to study the knowledge of rural Indian women about this important aspect of their life having lifelong impact on their children with the given objectives:

1. To study the knowledge of rural women regarding food and nutrition requirements of infants; and
2. To study the relationship between Socio-economic status of the respondents and their knowledge regarding food and nutrition requirements of infants.

**Review of Literature**

Kaur *et al.* (2015) [1] stated that Rural women’s nutritional awareness was significantly connected to their age, education, Occupation, caste and family income.

Robert (1981) [2] shows that family income has a major impact on mother's nutritional understanding.

Gorted (2019) stated that rural women possessed knowledge of colostrum feeding, supplementary foods, new born’s nutritional needs and breastfeeding for upto two years. Majority of the respondents (88.00%) were aware that mother's milk is a complete diet for infants.

Yeshalem (2017) [4] stated that only 28.7 percent of mothers had adequate knowledge of new born and small child feeding practices.

Nale *et al.* (2013) [5] showed that when mothers' educational levels climbed, the nutrition quality of their children improved.

Varma (2003) investigated "Rural women's health and nutrition knowledge in the Bikaner District ICDS programme. The findings showed that more than half of the rural women were unaware of basic food and nutrition as well as children's nutrition.

**Research Methodology**

Current study was conducted in Mansi Block of Khagaria district of Bihar. Ex-post facto design of research was used in the study. A Knowledge Test on food and nutrition requirements of infants was prepared and standardised to test the knowledge of women respondents on the matter as described above. To assess the Socio-economic status of the respondents, Trivedi and Parekh Scale (1963) with certain modification was used. Data were collected using personal interview method and through feeding the Knowledge Test to the respondents. For analysis of data, statistics used were frequency, percentage, correlation and regression.

**Results and Discussion**

The findings and discussion of this study is based on an evaluation of knowledge of rural women about food and nutrition requirements of infants.

Knowledge of rural women about food and nutrition requirement of infants were recorded through a Knowledge

Test devised for the purpose which is depicted in table below:

**Table 1:** Score range of knowledge

Sl. No.	Category	Score
1.	Low	11-15
2.	Medium	16-20
3.	High	21-25

(N=100)

Respondents' minimum and maximum Knowledge Test scores were 11 and 25, out of a possible 30 scores.

Table 2 depicts the standard deviation in knowledge as given below: Details presented in the table 2 reveal that there as a difference of 14 (11-25) in range of knowledge with coefficient of range value of 0.388 and standard deviation of 2.986 against an average score value of 17.49.

**Table 2:** Standard deviation in knowledge

Range of knowledge	Coefficient of range	Average score	Standard deviation
11-25(14)	0.388	17.49	2.986

Table 3 depicts the distribution of respondents on the basis of their knowledge level. It is revealed from the table that 14 percent women had low knowledge of food and nutrition requirements of infants with a mean knowledge level of 12.357 and standard deviation of 1.151. Further, the table illustrates that 71 percent women had minimum level of knowledge with a mean of 17.493 and standard deviation of 1.263. Only 15 percent women had high knowledge with a mean of 22.267 and standard deviation of 1.751.

**Table 3:** Distribution of respondents on the basis of their knowledge level

Knowledge with score range	n	%	Mean	Standard deviation
Low (11-15)	14	14	12.357	1.151
Medium (16-20)	71	71	17.493	1.263
High (21-25)	15	15	22.267	1.751

Table 4 shows the relationship of Socio-economic variables of the respondents and their knowledge regarding food and nutrition requirements of infants.

**Table 4:** Relationship between Socio-economic variables of the respondents and their knowledge about food and nutritional requirements of infants

Variables	Correlation ‘r’
Age	.638**
Caste	.478**
Occupation	-.217*
Education	.533**
Family type	-.138
Family size	-.134
Land holding	.043
Social participation	.500**
Mass media exposure	.761**
Milch and small animal	-.042
Age of infant	.003
Gender of infant	.103
Sequence of infant	.643**

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).

From table 4, it is revealed that type of house was found to be positively and significantly related with the knowledge of rural women regarding food and nutrition requirement of infants at 5% level of significance and age, caste, education, social participation, mass media exposure and order of infant were found to be positively and significantly related with knowledge of rural women regarding food and nutrition requirements of infants at 1% level of significance.

**The regression analysis between Socio-economic variables of the respondents and their knowledge regarding food and nutrition dependent variables:** 'F' value found through the above table 5 was 61.74 which was found significant at 1 percent level. Among 11 Socio economic variables, four variables of age, social participation, mass media exposure and annual income were positively and significantly related with knowledge of rural women regarding food and nutrition requirements of infants at 1 percent level of significance.

**Table 5:** Regression analysis between Socio-economic status of the respondents and their knowledge regarding food and nutrition requirements of infants

Socio-economic variables	B	Std. Error	T	Sig.	R square
Age	1.279	.296	4.320**	.000	.859
Occupation	-.881	.100	-8.814**	.000	
Education	.564	.260	2.169	0.33	
Family size	-.013	.224	-.056	.955	
Land holding	-.283	.170	-1.666*	.099	
Social participation	.713	.202	3.523**	.001	
Mass media exposure	.845	.101	8.385**	.000	
Milch and small animal	-.060	.172	-.347	.729	
Age of infants	.174	.097	1.800*	.075	
Gender of infant	-.110	.209	-.527	.600	
Sequence of infant	.182	.181	1.003	.319	
Annual income	.750	.166	4.523**	.000	

It means, if their age, social participation, mass media exposure and annual income increase, the knowledge of rural women regarding food and nutrition requirement of the infants will also increase.

### Conclusion

The study concludes that only 15% women possess high level knowledge of food and nutrition requirements of infants. Further, the study reveals that the factors, like, age, education, social participation, mass media exposure and annual income were positively correlated to knowledge of women. Thus, by educating women and giving them more access to social participation and mass media exposure will lead to high knowledge of food and nutrition requirements of infants among them. In addition, if the family income is enhanced, it will enhance the knowledge of women about the food and nutrition requirements of infants.

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