



A Comparative Study To Assess The Nutritional Awareness of Rural and Urban Mothers in Some Selected Areas of West Bengal

KEYWORDS

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ABSTRACT Proper nutrition is an important part of child growth and development. Mothers' awareness regarding nutrition is utmost necessary for determining a good nutritional status of the child. Thus the present study aimed at assessing the nutritional awareness of rural and urban mothers from some regions of West Bengal. Out of total 518 mothers included in the study, the percentage of mothers educated upto secondary level followed by Graduation or Post- Graduation was higher among urban mothers (81.8%) than rural mothers (59.0%). Maternal literacy was identified as an important socio demographic variable which shows strong association with maternal nutritional awareness for both rural ($X^2=41.29$) and urban ($X^2=11.95$) mothers. Average nutritional awareness level was found quite good among both rural and urban mothers and the mean difference of Nutritional Knowledge (NK) score was statistically not significant. More knowledge enhancement of mothers is recommended by empowering them with more nutrition and health related information.

Introduction:

Good health and proper nutrition in infancy and childhood plays a key role in determining ones overall lifestyle throughout the life. And mothers play the most important and vital role in shaping the healthy eating habits and good nutrition in children. Besides mother's knowledge also provide a greater degree of protection against infections and other communicable diseases to the child through proper nutrition and effective domestic and external health care⁽¹⁾. Thus mother's understanding and proper knowledge regarding child's health and nutrition is of prime importance in ensuring sound foundation and secure future of child's health.

Child malnutrition still remains as a burning problem in India .According to Global Hunger Index (GHI) developed by IFPRI, India ranks 117th out of 119 countries in child malnutrition^(2, 3). Hence this above background focused on the importance of maternal awareness regarding health and nutrition. Thus the present study aimed at determining the nutritional awareness of mothers from both rural and urban set up.

Methods:

The present study was undertaken in some selected rural and urban areas from three districts (viz. North 24 Parganas, South 24 Parganas and Howrah) of West Bengal. The total 518 mothers within the age group of 18-45 years and having children within 0-12 years were included in the study through stratified random sampling. The mothers were briefed about the study, consent was given and were interviewed through a pre-tested, structured interview schedule. General information regarding their age, religion, caste, occupation, monthly family income etc were gathered and their nutritional awareness was assessed through a pre-tested, structured Nutritional Knowledge (NK) questionnaire. The NK score was determined (correct response = 1; incorrect = 0) and the overall awareness level was represented as the total of correct responses in percentages. The information pertaining to the basic concepts of nutrition, nutritive values of common foods, child health problems and its management, immunisation, breast

feeding practises, weaning foods, healthy eating habits of children, food handling practises etc were included in the questionnaire.

Results:

Out of total 518 mothers interviewed, majority of the rural mothers (81.4%) were aged below thirty years; whereas most of the urban mothers were aged above thirty years. The minimum age reported was 18 years and the maximum was 45 years. Major percentage of both rural (86.8%) and urban (96.9%) mothers were Hindu by religion and were belong to nuclear type family set up (viz. 79.1% rural and 57.9% urban mothers). Again mothers were grouped as per their Socio-economic status (SES) [according to Modified Prasad Scale (May, 2016)]⁴. It was found that most of the rural mothers (83%) belonged to low SES (i.e. SES class IV and V, monthly family income per capita is < Rs. 942 to Rs.1882).On the other hand only 37% urban mothers were from SES class IV and V. Depending on occupation most of the rural (91.5%) and urban (79.5%) mothers were housewives. The education of most of the urban mothers were upto secondary level (65.6%) followed by Graduation / Post Graduation (16.2%) and a small percentage was found illiterate (5%); whereas in rural set up percentage of secondary level education (48.2%) and Graduation / Post Graduation (10.8%) were comparatively low and the percentage of illiterate mothers (17.7%) were comparatively high.

Table 1 : Description of Demographic characteristics of Rural and Urban Mothers

		Mothers (N=518)	
Sl No.	Demographic Variables	Rural (n=259)	Urban (n=259)
1.	Age		
	<30 years	211 (81.4)	100 (38.6)
	>30 years	48 (18.5)	159 (61.3)

2.	Religion		
	Hindu	225 (86.8)	251 (96.9)
	Muslim	34 (13.1)	08 (3.0)
3.	Caste		
	GEN	25 (9.6)	209 (80.6)
	SC/ST/OBC	234 (90.3)	50 (19.3)
4.	Family Type		
	Joint	54 (20.8)	109 (42.0)
	Nuclear	205 (79.1)	150 (57.9)
5.	SES		
	SES CLASS (I & II)	25 (9.6)	98 (37.8)
	SES CLASS (III)	19 (7.3)	65 (25.0)
	SES CLASS (IV & V)	215 (83.0)	96 (37.0)
6.	Occupation		
	Working	22 (8.5)	53 (20.4)
	Housewife	237 (91.5)	206 (79.5)
7.	Literacy Status		
	Illiterate	46 (17.7)	13 (5.0)
	Primary level	60 (23.1)	34 (13.1)
	Secondary level	125 (48.2)	170 (65.6)
	Graduate/ Post Graduate	28 (10.8)	42 (16.2)

*Figures within parentheses indicate percentage

Table 2 depicts the nutritional awareness level of mothers. Major percentage of both rural (87.6%) and urban (75.6%) mothers were found to possess good knowledge regarding nutrition.

Table 2: Distribution of Rural and Urban Mothers according to their Nutritional Awareness Level

Nutritional Awareness Level	% NK Score	Mothers (N=518)	
		Rural (n=259)	Urban (n=259)
Poor	0-25	0 (0)	3 (1.1)
Average	26-50	25 (9.6)	38 (14.6)
Good	51-75	227 (87.6)	196 (75.6)
Very Good	76-100	7 (2.7)	22 (8.5)

*Figures within parentheses indicate percentage

With regard to rural mothers, a significant association was found between the nutritional awareness of mothers and selected demographic variables (Table 3) such as, literacy status ($X^2 = 41.29$) and occupation ($X^2=8.033$). There was no significant association between demographic variables such as, age, caste, family type, SES etc. With regard to urban participants, a significant association was found between the nutritional awareness of mothers and selected demographic variables such as, family type, SES, occupation and literacy status (Table 3). No such association was found between age, caste and religion.

Table 3: Association of Nutritional Awareness of Mothers with Selected Demographic variables

Sl no	Sample Characteristics	Rural (n=259)			df	X^2 value	Urban (n=259)			
		< or = Median	>Median				< or = Median	>Median	df	X^2 value
1.	Age				1	0.170, NS			1	2.06, NS
	<30 years	134	77				50	50		
	>30 years	32	16		65	94				
2.	Religion			1	1.51, NS			1	0.091, NS	
	Hindu	134	91				112			139
	Muslim	24	10		4	4				
3.	Caste			1	0.201, NS			1	2.921, NS	
	GEN	15	10				85			124
	SC/ST/OBC	151	83		27	23				
4.	Family Type			1	0.693, NS			1	9.506, P<0.05	
	Joint	32	22				61			48
	Nuclear	134	71		55	95				
5.	SES			2	1.105, NS			2	42.07, P<0.05	
	SES (I & II)	14	11				21			77
	SES (III)	11	8				29			36
	SES (IV & V)	140	75		65	31				
6.	Occupation			1	8.033, P<0.05			1	3.76, NS	
	Working	8	14				30			23
	Housewife	158	79		86	120				
7.	Literacy Status			3	41.29, P<0.05			3	11.95 P<0.05	
	Illiterate						07			06
	Primary level	40	06				19			15
	Secondary level	47	13				81			89
	Graduate/ Post Graduate	60	65		09	33				
		08	20							

*NS indicates Not Significant

The mean nutritional knowledge (NK) score of both rural and urban mothers were found to be satisfactory, and no significant difference exists between the nutritional knowledge of rural and urban mothers (Table 4).

Table 4: Comparison of Nutritional Knowledge Score of Rural and Urban Mothers

Location	Sample No (N=518)	% NK Score		t-test
		Mean	SD	
Urban	259	63.19	12.33	*2.755
Rural	259	60.72	7.49	

*P>0.05, Not significant

Discussion:

The present study revealed that majority of both rural and urban mothers were educated upto secondary level. Although the percentage of mothers educated upto secondary level followed by Graduation or Post- Graduation was higher among urban (81.8%) mothers than rural (59.0%) mothers. Again maternal literacy status showed a significant association with maternal nutritional knowledge. However association of maternal literacy with their nutritional knowledge was also evident by the findings of Pattan. et.al⁵. Hence the above findings supported the importance of maternal literacy in developing better nutritional knowledge. Saaka, M. worked on mothers' nutritional knowledge in childcare practices in rural communities of Ghana and also mentioned that mothers of high educational standing possessed more knowledge in childcare as compared to mothers of low educational level⁶. Berihu.et.al also found a parallel increase in mothers' knowledge on nutritional requirement of infant with their educational level⁷. No significant association was found between maternal nutritional knowledge and the socio-demographic variables like age, religion and caste. Besides urban mothers also showed a significant association between nutritional knowledge and family type and SES. Although the difference between the mean NK score among rural and urban mothers was not statistically significant indicating a good level of nutritional awareness among them.

Conclusion:

The present study identified maternal literacy as an important socio demographic variable which shows strong association with maternal nutritional awareness for both rural and urban mothers. However average nutritional awareness level was found quite satisfactory among both rural and urban mothers and the mean difference of NK score was statistically not significant. To improve more the Mean NK score of mothers it is necessary to empower them with essential information regarding health and nutrition along with formal education.

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