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A Study to Assess the Knowledge of Mothers Regarding Nutritional Status of Under Three-Years at Selected Urban Areas at Sankeshwar

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Abstract

Background of the study*: Solid knowledge of maternal/caregiver regarding nutrition serves as a safeguard against factors that result in low weight-for-age z-score and low height-for-age z-score in children. The historical trend has shown that indicators of favorable child nutritional status have typically been lower in urban regions due to the prevalence of working mothers.* ***Objectives:*** *To assess the knowledge of mothers regarding nutritional status of child.* ***Methods:*** *This research adopted a cross-sectional design, and the sample selection was based on the Convenience sampling technique. The study included a group of 50 mothers having children under 3 years of age. The data collection process involved the use of tools like demographic characteristics assessment and a structured knowledge questionnaire.* ***Results:*** *Majority 34(56.7%) of study subjects had good knowledge; 16(26.7%) of study subjects had Average knowledge; and 10(16.7%) of them had poor knowledge regarding nutritional status. Education of the mothers showed a significant association with knowledge score of mothers regarding nutritional status of children ($p<0.05$).* ***Conclusion:*** *Research showed that mothers had good and average knowledge regarding child nutritional status.*

Keywords: Assess, knowledge, nutrition, children, safeguard against low z-scores, low weight-for-age

INTRODUCTION

The period spanning from conception to the child's second birthday is crucial for development, encompassing the initial 1000 days of life. This era provides the foundation for healthy health, growth, and neurological development. Unfortunately, this vital window period is minimized, particularly in low-middle income nations, which suffer the heaviest burden of child malnutrition with high morbidity and mortality rates [1]. The findings demonstrated that improving the mother's/caregiver's knowledge, attitude, and actions will dramatically enhance a child's nutritional status. To combat childhood malnutrition, there has been a paradigm shift in maternal nutrition understanding and health-seeking behaviors. Children benefit the most when their primary carers, their mothers, increase their dietary knowledge and behaviors. According to other studies, ensuring carers have a strong awareness of foods acceptable for children are critical in improving children's nutritional circumstances [2].

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Additionally, it has been noted that the issue of malnutrition in India is localized, implying that a limited number of states, districts, and villages bear a disproportionate burden of malnutrition [3]. Only five states and 50% of communities bear nearly 80% of the starvation burden. Over 33% of children in India below the age of 5 years exhibit stunted growth, indicating being undersized for their age or having a height-for-age score of –2, with a total of 9.7 million affected in 2016. In India, basic

education does not have a public health nutrition component, but a nutrition subject is included in the junior secondary curriculum [4].

These nutritional groups are divided into macronutrients (needed in relatively large amounts) and micronutrients (required in smaller amounts). Macronutrients include carbohydrates, fats, protein, and water. Micronutrients include minerals and vitamins [5].

With the exception of water, macronutrients serve the dual purpose of supplying structural components, such as amino acids for protein formation and lipids for building cell membranes and certain signaling molecules, along with providing energy. Vitamins, minerals, fiber, and water, although not necessary for energy generation, play crucial roles for various other reasons. Fiber, classified as a distinct dietary substance, is equally indispensable for mechanical and metabolic purposes, even though the specific reasons for its importance are not fully understood [6].

Researchers are required to provide proper education to working mothers about caring for their 3-year-old children, as it will contribute to the proper growth and development of the children.

MATERIAL AND METHODS

Research area.

Research was conducted in the selected urban areas.

Research design.

Descriptive research design was used.

Population

Study population.

Under 3 years children currently available during data collection were the population source.

Inclusion Criteria

Available during data collection.

Exclusion Criteria

Not interested in the study were excluded from the study.

Sample Size

50 under 3 years children's mothers were selected.

RESULTS

Table 1 shows the frequency and percentage distribution of the demographic variables of mothers. According to their age, majority 16(32%) were in <20 years of age, 15(30%) were 31–40 years of age, 14(28%) were 21–30 years and 5 (10%) were >40 years of age.

Regarding religion of mothers, maximum 25(50%) were Hindus and 15(30%) were Christians and 10(20%) were Muslims. Regarding number of children, majority 37(74%) were having 1–2 children, 11(22%) were having 3–4 children and 2(4%) were having more than 5 children.

Regarding family monthly income of mothers, maximum 19(38%) were having monthly income <Rs. 10,000, 16(32%) were having monthly income of Rs. 10000 to 20,000 and 15(30%) were having family income above Rs. 20,000.

Regarding type of family of mothers, maximum 23(46%) were having Joint, 19(38%) were having nuclear family and 8(16%) were having extended family.

Table 1. Socio-demographic variables of respondents (N=50).

S.N.	Demographic Variables		Frequency	Percentage
1	Age (years)	<20	16	32
		21–30	14	28
		31–40	15	30
		>40	5	10
2	Religion	Hindu	25	50
		Christian	15	30
		Muslim	10	20
3	Number of children	1–2	37	74
		3–4	11	22
		>5	2	4
4	Family Monthly income	Less than Rs. 10,000	19	38
		Rs. 10,000–20,000	16	32
		Above Rs. 20,000	15	30
5	Type of family	Joint	23	46
		Nuclear	19	38
		Extended	8	16
6	Education status	No formal education	10	20
		Primary School	13	26
		High School	10	20
		Higher secondary	10	20
		Graduation and above	7	12
	Total		**500**	**100**

Table 2. Knowledge level of children's mothers regarding nutritional status.

Level of knowledge	No of study subjects	Percentage
Poor knowledge	10	20
Average knowledge	10	20
Good knowledge	30	60

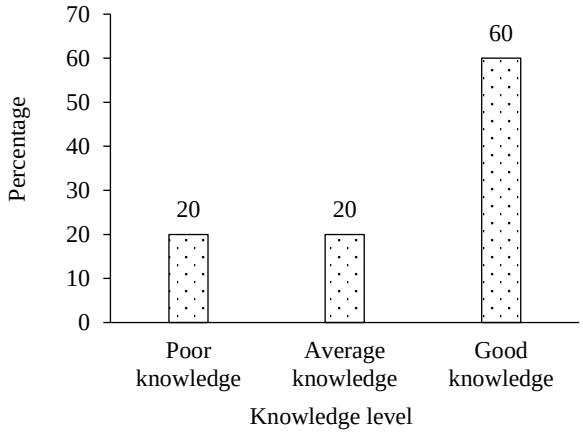

Figure 1. Knowledge level of mothers.

With regard to educational status of mothers, 13(26%) were having primary education, 10(20%) belonged no formal education, high school and high secondary and 7(12%) were having graduation and above. Table 2 and Figure 1 show that the majority 30(60%) of study subjects had good knowledge; 10(20%) of study subjects had Average knowledge; and 10(20%) of them had poor knowledge regarding nutritional status.

Table 3. Association between knowledge Level of mothers regarding nutritional status with selected socio-demographic variables (N=50).

Demographic Variables		Level of knowledge			χ^2 value	df	p value
		Poor	*Average*	*Good*			
Age (years)	14–15	2	2	10	8.839[a]	4	0.683[NS]
		2	4	10			
	16–17	2	3	9			
	>18	4	1	1			
Religion	Hindu	7	5	15	1.109[a]	2	0.258 [NS]
	Christian	2	3	8			
	Muslim	1	2	7			
Number of children	1–2	9	7	10	1.863[a]	4	0.237 [NS]
	3–4	1	2	10			
	>5	0	1	10			
Family Monthly income	Less than Rs. 10,000	1	1	10	1.923[a]	2	0.267[NS]
	Rs. 10,000–20,000	1	3	10			
	Above Rs. 20,000	8	6	10			
Type of family	Joint	3	4	10	0.123[a]	4	0.832 [NS]
	Nuclear	3	4	12			
	Extended	4	2	8			
Education status	No formal education	1	1	10	0.704[a]	2	0.012***s**
	Primary School	2	2	10			
	High School	1	2	5			
	Higher secondary	5	5	0			
	Graduation	1	0	5			

**p<0.05 level of significant association, S: significant NS: non significant.*

The Table 3 shows that education of the mothers has significant association with knowledge score of mothers regarding nutritional status of children ($p<0.05$). Socio-demographic variables like Age, religion, family monthly income, type of family, and number of children were having no significant association with knowledge score of mothers regarding nutritional status of children.

DISCUSSION

The objective of this study was to evaluate the understanding of child nutrition among mothers with children under the age of 5 years in selected areas of Lunawada. The findings revealed that more than half of the mothers exhibited a commendable level of knowledge regarding nutrition.

A similar investigation examined the link between maternal knowledge of nutrition in childcare practices and the growth of children residing in impoverished rural communities [7]. This analytical cross-sectional study included a random sample of 991 children aged 0–36 months. Upon adjusting for potential confounding factors, the multivariate analysis demonstrated a notably positive correlation between the childcare knowledge index and the mean HAZ ($\beta=0.10$, $p=0.005$), although no association was observed with the mean WHZ. The strength of this association was more pronounced among women of higher socioeconomic status ($\beta=0.15$, $p=0.014$), while no significant association was noted among women of lower socioeconomic status. Enhancing maternal childcare knowledge could potentially make a substantial contribution to the nutritional well-being of children in Ghana, particularly if there is concurrent improvement in the socioeconomic conditions of women residing in underserved rural communities [8].

A research project was undertaken to evaluate the understanding of mothers concerning the nutritional requirements and health of children under the age of 5 years in Tirupathi. The study involved 100 mothers and aimed to assess their knowledge regarding the nutritional needs, growth and development, immunization, and nutrition during illness of under-five children. Additionally, the research sought to explore the relationship between demographic variables and independent variables.

The findings indicate that mothers exhibit satisfactory knowledge concerning immunization, the growth and development of children, as well as good practices and a fair attitude. However, the scores for knowledge related to general nutritional needs and nutrition during illness are notably low. Mothers seem to have limited awareness about childhood nutritional deficiencies. The study revealed no association between independent variables such as age, family, income, and occupation. Still, there was an observed correlation between the mother's education level and their knowledge about the nutrition and health of children under the age of 5 years. In conclusion, the study suggests the importance of educating mothers about nutritional deficiencies and supplementation to enhance the health of children under the age of 5 years [9, 10].

CONCLUSION

Many studies are needed to educate mothers about children's nutrition and health care, which aids in children's proper growth and development. Since this study indicated a link between education and knowledge, more awareness and education are needed to educate moms about child nutrition and health for the good of the country.

Competing Interest

The authors report no conflicts of interest for this work.

Authors' Contributions

All authors were involved in the interpretation of the data and contributed to manuscript preparation. All authors have read and approved the final version of the manuscript.

REFERENCES

1. De Onis M, Blössner M, Borghi E, Morris R, Frongillo EA. Methodology for estimating regional and global trends of child malnutrition. Int J Epidemiol. 2004 Dec 1; 33(6): 1260–70.
2. Vidya C, Rao DB. A Text Book of Nutrition. India: Discovery Publishing House Pvt. Limited; 2010. Available from: https://www.google.co.in/books/edition/A_Text_Book_Of_Nutrition/veOyMrXA29AC?hl=en&gbpv=0
3. Kaur H, Biswas M, Malik P, Chauhan I, Babli M. Assessment of Nutritional Status of Under-5 Children using WHO. Int J Sci Res. 2018; 7(7): 30–2.
4. Mishra A, Bhardwaj UD, Rani S. Knowledge regarding Malnutrition and Its Prevention–A Study on Slum Dwelling Mothers. Int J Nurs Midwifery Res. 2017; 4(2): 32–7. ISSN: 2455-9318
5. Gulati A, Kumar AG, Shreedhar G, Nandakumar T. Agriculture and malnutrition in India. Food Nutr Bull. 2012 Mar; 33(1): 74–86.
6. Heath M, Tynan C. Crafting a research proposal. The Marketing Review. 2010 May 24; 10(2): 147–68.
7. Saaka M. Relationship between mothers' nutritional knowledge in childcare practices and the growth of children living in impoverished rural communities. J Health Popul Nutr. 2014 Jun; 32(2): 237–48.
8. Ganga Bhavani B. A Study to Assess the Knowledge, Attitude and Practices of Mothers Regarding Nutritional Needs and Health of Under-Five Children in Tirupathi. Acta Sci Agric. 2021; 5(10): 15–20. Available from: https://actascientific.com/ASAG/pdf/ASAG-05-1062.pdf
9. Mahjabin T, Nowar A, Islam MH, Jubayer A. Effect of Mother's Nutritional Knowledge and Hygiene Practices on School-Going Adolescents Living in Dhaka City of Bangladesh. Indian J

Community Med: Official Publication of Indian Association of Preventive & Social Medicine. 2022 Jul; 47(3): 391–395.
10. Ali AH, Abdullah MA, Saad FM, Mohamed HA. Immunisation of children under 5 years: mothers' knowledge, attitude and practice in Alseir locality, Northern State, Sudan. Sudan J Paediatr. 2020; 20(2): 152–162. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7423313/

