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Prevention of Malnutrition among Mothers of under Five Children, Assess the Effectiveness of Planned Teaching Program on Knowledge at Selected Anganwadi's of Bagalkot

Mr. Akshaya Kumar H[1], Ms. Drakshayani B[1], Mr. Prajwal H[1], Ms. Shilpa B[1], Mr. Umesh N[1], Miss. Swati Linganagoudra[2*], Prof. Jayashree Itti[3]

[1]B.Sc. Nursing Final Year Student of Shri B.V.V.S Institute of Nursing Sciences Bagalkot Karnataka, India
[2]Lecturer Department of Child Health Nursing, Shri B.V.V.S Institute of Nursing Sciences Bagalkot Karnataka, India
[3]Principal of Shri B.V.V.S Institute of Nursing Sciences Bagalkot Karnataka, India

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***Corresponding author:** Miss. Swati Linganagoudra
Lecturer Department of Child Health Nursing, Shri B.V.V.S Institute of nursing sciences Bagalkot Karnataka, India

Abstract **Original Research Article**

***Background of the Study*:** Every child develops and grows at her/his own pace and own time through reaching the various developmental milestones. Recent evidence indicates that good nutrition, particularly in early childhood, is critical to positive health outcomes of children in fact, children nutritional status can be viewed as good proxy indicator of a community state of health. Adequate nutrition during early childhood is fundamental to the development of each child's potential. It is established that the period from birth to two years of age is a ''critical window ''for the promotion of optimal growth, health and overall survival of children. ***Objectives*:** "To assess the knowledge of malnutrition among mothers of under five children as perceived from mothers of under five children at selected Anganwadi's of Bagalkot.'' ***Methods*:** A structured teaching program with sample of 60 mothers of under five children was selected with the nonprobability convenient sampling technique was used for the study. The questionnaires was used to statistical analysis. The data was entered in MS Excel sheet for analysis. ***Result*:** Assessment of the level of knowledge of the mothers reveals that majority (98.33%) of the mothers had a average knowledge,1.66% of mothers who had a good knowledge and not any mother had poor knowledge regarding prevention of malnutrition among mothers of under five children. **Conclusion:** A study found there is a significant difference between pretest score and post test score of under-five mothers of children with their knowledge and prevention of malnutrition.

Keywords: Assess, Effectiveness, Knowledge, Malnutrition, Prevention, Under Five Children.

INTRODUCTION

"Eat Right, Be Bright"

Every child grows and develops at his or her own pace and in his or her own time by achieving various developmental milestones. Children's growth and development do not happen in a straightforward manner, but are affected by each child's environment, nutrition, and parental care. These factors are essential in helping a child reach his or her full potential. The nutritional condition of a child is typically characterized by anthropometry, specifically body measurements like weight, in relation to age or height, which indicates the level of underweight or wasting in that child. Food is the essential requirement of life; existence cannot be maintained without sufficient nourishment, and a child requires proper food for growth and development. According to the WHO, breast milk fulfils all the nutritional needs that an infant has for proper growth and development during the initial six months of life. Children are considered malnourished when their diet does not supply sufficient nutrients for growth and upkeep, or if they are not able to effectively use the food they consume as a result of illness (under nutrition) [1].

Good nutrition is essential for maintaining health, and children who are adequately fed during their first two years of life have a higher likelihood of remaining healthy throughout their childhood. During the initial six months of a child's life, breast milk exclusively is the best source of nutrition. It provides all necessary nutrients for healthy development along with immune components that safeguard against prevalent childhood illnesses. Proper nutrition is fundamental for the survival, health, and growth of the current and future generations. Children who are well-nourished excel

academically, evolve into healthy adults, and subsequently offer their children a stronger foundation in life. UNICEF states that in the least developed countries, 42% of children experience stunting and 36% are underweight due to poor nutrition or undernutrition. The World Health Organization (WHO) describes malnutrition as "the failure of cells to perform their physical functions due to the inability to acquire and utilize the energy and nutrients required in terms of amount, combination, and timing [2].

Water low and Insel (1995) characterized malnutrition as "failing health that stems from long-term faulty nutrition that either does not meet or considerably exceeds the appropriateness of the ingested food. Additionally, Harrison and Water low (1990) defined malnutrition as the consequences of any nutrient deficiency, encompassing energy, protein, and micronutrients [3].

Malnutrition can be defined operationally as a deficiency in essential nutrients or the inability to maximize the utilization of available food (Barasi 1997). Malnutrition impacts physical growth, illness, death rates, cognitive development, reproduction, and physical work capacity, ultimately affecting human performance, health, and survival. A well-nourished child's weight and height measurements align closely with the standard normal distribution of heights and weights of healthy children of the same age and sex. From this viewpoint, malnutrition is not merely a shortage of food lacking essential nutrients. It is instead the inability of cells to carry out their physiological functions due to their failure to receive and utilize nutrients in the correct proportions [4].

Objectives of the Study

- To assess the knowledge regarding prevention of malnutrition among mothers with under five children.
- To find out the relationship between the level of knowledge regarding the prevention of malnutrition among mothers with under five children.
- To assess the knowledge regarding prevention of malnutrition among mothers with under five children with their socio demographic variable.
- To assess the effectiveness of planned teaching programme and post-test regarding prevalence of malnutrition among the mothers of under five children.

METHODS

It was structured teaching programme with an intended to assess the knowledge regarding prevention of malnutrition among mothers of under five children as perceived from the mothers of under five children at selected Anganwadi's of Bagalkot.

Study Participants: The study participants were mothers of the under five children at selected Anganwadi's of Bagalkot. Followed by the nonprobability convenient sampling technique.

Setting of the Study: Based on the investigator`s familiarity, availability of the subjects and feasibility to conduct the study, the present study was conducted in selected Anganwadi's of Bagalkot.

Sampling Technique: The sample was selected by the nonprobability convenient sampling technique will be used to select the sample form selected Anganwadi's of Bagalkot.

Data Collection Instruments: Questionnaires it includes questions related to mothers knowledge towards prevention of malnutrition. The questionnaires each item given a score of 1.

Translation and Reliability of Data Collection Instrument: The instrument was translated into Kannada language and retranslated to English. The Reliability of STP study obtained by test and the r value was found to be 0.8Since, the reliability of R is more than 0.7. The by questionaries on knowledge regarding prevention of malnutrition among mothers of under five children, was found to be more reliable. Hence investigator has decided to use the same tool in main study to collect the by questionaries on knowledge regarding prevention of malnutrition among mothers of under five children.

PROCEDURE FOR DATA COLLECTION

Data collection was done for 15 days from 16-08-2024 at Anganwadi Center no.67 near Motagi Basaveshwar temple Bagalkot. A formal Permission was obtained from the Principal of Shri B. V. V. S Institute of Nursing Sciences Bagalkot. Then permission was obtained from the Teacher of Anganwadi's of Bagalkot, The purpose of the study was explained to the Anganwadi's teachers the investigator given self-introduction explained the purpose of data collection to the subjects and subject's willingness to participate in the study. The subject was assured the anonymity and confidentiality of the information provided by them by questionaries on knowledge regarding prevention of malnutrition among mothers of under five children. To assess knowledge regarding prevention of malnutrition among mothers of under five children and Each participant has tell that the taken around 30 minutes to complete the scale.

Data Analysis

The data obtained were analysed according to the research objectives using inferential statistics. The main data was prepared based on the participants responses. Frequency and percentage statistical analysis.

Feature select and select different populations in words and pictures.

ETHICAL CLEARANCE

Ethical clearance was obtained from the Institutional Ethics Committee of BVVS Institute of Nur sing Sciences, Bagalkot.

RESULT

Part I: Description of the Socio-Demographic Characteristics of Sample

Depicts that the majority (50%) of mother were in the age group of 25-30 years,21-25 years followed by this 35% of mother, mother were in the age group of more than 30 years followed by this 15%, null of mother were in the age group less than 20 years.

Depicts that the majority (88.33%) of mother were Hindu, followed by this 11.66% of mother were Muslim are involved in this study.

Depicts that the majority (68.33%) of mother were vegetarian, followed by this 31.66% of mother were mixed are involved in this study.

Depicts that the majority (55%) of a mother were in the type of nuclear family, type of joint family followed by this (43.33%), type of extended family followed by (1.66%).

Depicts that the majority (55%) of a mother were in the type of nuclear family, type of joint family followed by this (43.33%), type of extended family followed by (1.66%).

Depicts that the majority (50%) of a mother income 10000-20000/, <10000/- followed by this (33.33%), 20000-30000/- followed by (16.66%).

Depicts that the majority (45%) of a mother Highschool, Primary followed by (21.66%) PUC followed by (20%) Illiterate followed by this (13.33%).

Depicts that the majority (65%) of a mother have one under five child, two followed by (30%) more then four followed by (5%) three followed by this (0%).

Depicts that the majority (75%) of a child health status were complete, partial followed by this (23.33%), not immunized followed by (1.66%).

Depicts that the majority (50%) of source of health education in health person, family members followed by (31.66%) Neighbours followed by (13.33%) mass media followed by this (5%).

PART II: Level of knowledge regarding prevention of malnutrition among mothers of under five children N=60

Level of knowledge	Range of scores	Number of respondents	Percentage (%)
Poor	0-26	0	0
Average	27-53	59	98.33%
Good	54-80	1	1.66%

Mean, SD and Mean percentage of knowledge scores of mothers N=60

Sl.no	Knowledge variables	Max Score	Mean	SD	Mean%
1.	Assessment of knowledge regarding prevention of malnutrition among mothers of under five.	80	42.73	4.7935	53.41%

Assessment of the level of knowledge of the mothers reveals that majority (98.33%) of the mothers had a average knowledge, 1.66% of mothers who had a good knowledge and not any mother had poor knowledge regarding prevention of malnutrition among mothers of under five children.

The Mean percentage of the pre-test knowledge scores was 53.41% percent with mean and SD 42.73±4.7935. These findings reveal that mothers had average knowledge regarding prevention of malnutrition.

PART III: Association between the pre-test knowledge scores of mothers on prevention malnutrition and selected socio-demographic variables

SI no	Socio demographic	Chi-square	d/f	P value	Significance
1	Age	9.19	6	0.2245	Not significant
2	Religion	2.44	6	0.8751	Not significant
3	Diet	0.4	2	0.8187	Not significant
4	Type of family	2.1	4	0.7174	Not significant
5	Occupation	1.17	4	0.883	Not significant
6	Income	0.32	6	0.9994	Not significant
7	Educational status	0.92	6	0.9885	Not significant

SI no	Socio demographic	Chi-square	d/f	P value	Significance
8	Under-five year children	0.95	6	0.9874	Not significant
9	Child health status	0.97	4	0.9143	Not significant
10	Source of health education	1.37	6	0.9677	Not significant

PART IV: A Significance difference between the pre-test and post-test knowledge scores of the mothers N=60

Knowledge area	Test	Mean	SD	Mean Diff.	SD Diff.	Paired t-value	Table value
Knowledge regarding prevention of malnutrition among mothers of under five children.	Pre test	42.73	4.7935	6.47	1.1485	2.264	1.96
	Post test	49.2	3.645				

*P<0.05 [Significant]

The calculated values were much higher than table value (1.96). Findings reveal that the difference between mean pre-test (42.73±4.79) and post-test (49.2±3.645) knowledge scores of mothers found to be statistically significant at 0.05 level of significance [t= 2.264].

DISCUSSION

The current research utilized an STP approach, with a comparable study carried out by Dr. Rajwant Kaur Randhawa, which aimed to raise awareness about malnutrition and its effects on mothers of children under five. A structured questionnaire was used to evaluate knowledge concerning the prevention of protein-energy malnutrition. No noteworthy association was found between the post-test knowledge and demographic factors such as age, socioeconomic status, education level, type of occupation, number of children, breastfeeding practices, and vaccination status [5].

The above mentioned study and our study sociodemographic variables scores of pre and post test are not significant and t -2.21(2.12) test valve are similar.

This study employed an STP approach, and a similar study was executed by Meena H, Nirbhay C, and Dharmesh C, which focused on the effectiveness of a structured teaching program aimed at enhancing knowledge about malnutrition and its prevention among mothers with children under five in selected rural regions of Bedla, Udaipur district. The chi square of age is similar to our study (9.81) [6].

The current study applied an STP method; a similar investigation was conducted by Patel N. with the goal of evaluating the effectiveness of a planned teaching program designed to increase knowledge regarding the prevention of malnutrition among mothers of children under five in a chosen urban locality in Visnagar. The mean score difference between the pre-test and post-test knowledge increased by 5. 06, indicating a significant enhancement in post-test scores regarding the mothers' knowledge about preventing malnutrition in children under five following the planned teaching program [7].

The current study utilized an STP framework, while a parallel study was conducted by AR. Bharathi to assess the level of knowledge concerning malnutrition among mothers of children under five in a specified area of Guduvancherry, aiming to evaluate knowledge regarding malnutrition prevention in order to develop a health education module. The association between knowledge and demographic factors revealed a significant correlation among the mothers' education, family type, and the spacing of children born [8].

The above mentioned studies are similar to our study.

CONCLUSION

The findings of the study concluded that the mothers lacked adequate knowledge regarding malnutrition and the structured teaching programme administered by the investigator helped them to improve the knowledge and attitude on malnutrition .The effectiveness of structured teaching programme was tested in terms of gain in knowledge and attitude and the findings showed that it was a statistically not significant .The findings of the study concluded that the structured teaching programme was effective in improving the knowledge and attitude of the mothers regarding the malnutrition. All the subjects had again in knowledge and attitude compared to their pretest knowledge scores.

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Research Concept: Prof. Jayashree Itty, Ms. Swati Lingangoudra
Research Design: Ms. Swati Lingangoudra
Supervision: Ms. Swati Lingangoudra
Materials: All researchers
Data Collection: All researchers
Data Analysis and Interpretations: All researchers
Literature Search: All researchers
Writing Articles: All researchers
Critical Review: All researchers

Article Editing: Ms. Swati Lingangoudra
Final Approval: Ms. Swati Lingangoudra

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