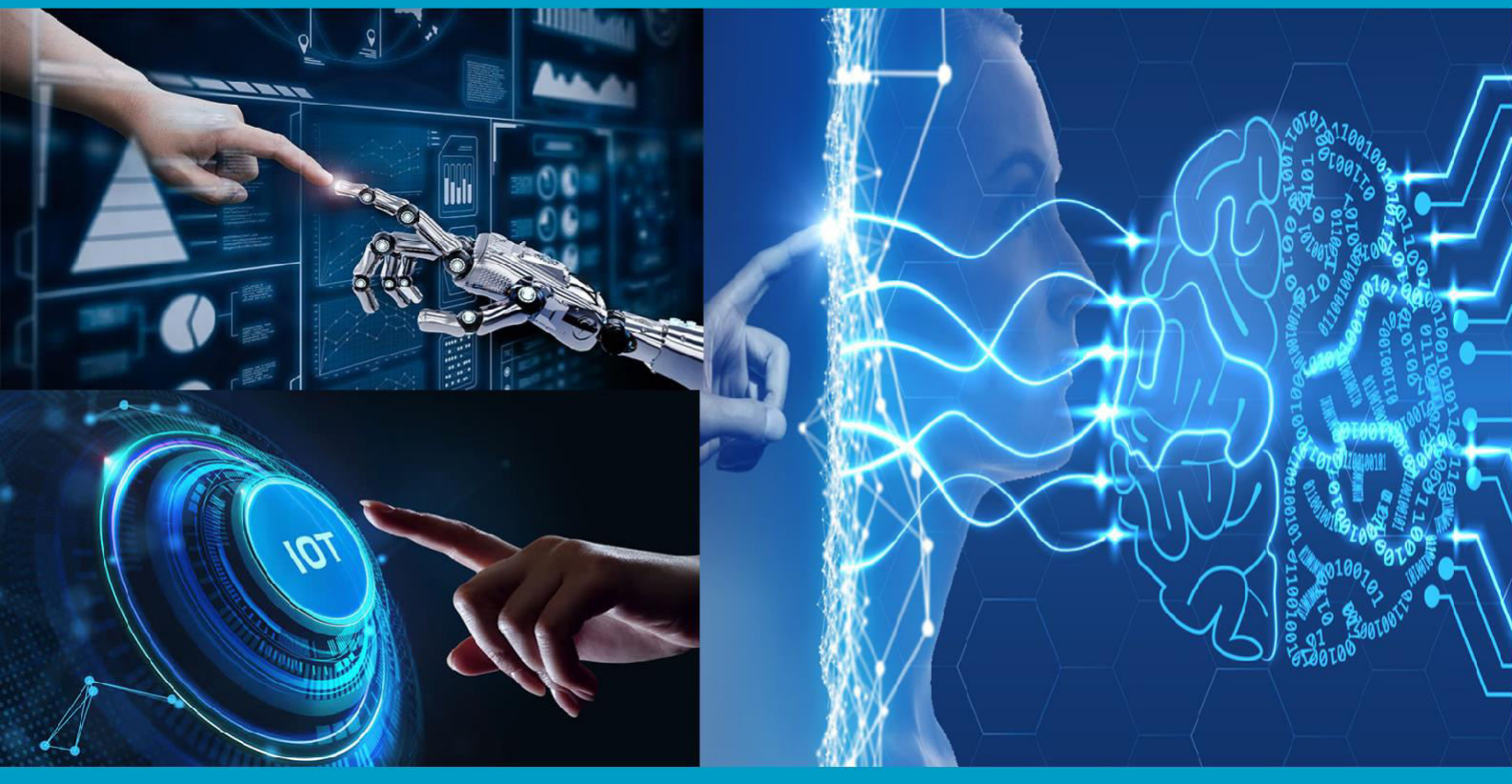
IJMRSETM

e-ISSN: 2395 - 7639



INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH

IN SCIENCE, ENGINEERING, TECHNOLOGY AND MANAGEMENT

Volume 10, Issue 3, March 2023

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

Impact Factor: 7.580

International Journal of Multidisciplinary Research in Science, Engineering, Technology & Management (IJMRSETM)

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.580| A Monthly Double-Blind Peer Reviewed Journal |

| Volume 10, Issue 3, March 2023 |

| DOI: 10.15680/IJMRSETM.2023.1003029 |

A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Malnutrition and Its Prevention Among the Mothers of Under Five Children in Selected Rural Areas at Bangalore

Mohan K[1], Pushpa H K[2], Anil Kumar C M[3], Prashantha S[4], Nagamani T[5]

[1]Vice Principal, Sri Shanthini College of Nursing, Bangalore, Karnataka, India

[2]Principal, Sri Shanthini College of Nursing, Bangalore, Karnataka, India

[3]Vice Principal, SCS College of Nursing, Mangalore, Karnataka, India

[4]Principal, Sneha College of Nursing, Bangalore, Karnataka, India

[5]Principal, Suyog College of Nursing, Mysuru, Karnataka, India

ABSTRACT:

Introduction: Children are a country's most valuable and vital resource because they represent its best hope for future success and production. The first five years of life are the most important of all. Growth retardation and malnutrition are likely the two health and nutritional issues that affect emerging nations like India the most. The deadliest type of malnutrition is PEM. Due to ignorance or budgetary constraints, many mothers fail to provide a healthy supper for their kids. Lack of proper dietary needs results in the child's poor growth, low intellectual development, recurrent illnesses, and ultimately death.

Methods: Sixty moms of children under the age of five who were chosen using a non-probability purposive sampling technique participated in a pre-experimental study. The investigation was carried out in Bangalore's Betahalli and Machohalli villages. A demographic proforma and a structured knowledge questionnaire were used to obtain the data. Descriptive and inferential statistics were used to analyse and evaluate the data that had been obtained.

Results: The results of the study shows that the majority of the mothers of under five children i.e. 55% were having inadequate knowledge, 45% were having moderate knowledge, and none of the mothers of under five children were having adequate knowledge regarding malnutrition and its prevention in the pretest. In the posttest 46.67% were having moderate knowledge, 45% were having adequate knowledge and only 8.33% of the mothers were having inadequate. It implies that the mean post-test knowledge score is significantly higher than the mean pre-test knowledge score in all the areas. It indicates that structured-teaching programme was effective in enhancing the knowledge of mothers of under five children regarding malnutrition and its prevention.

Conclusion: The study found that mothers of children under five did not have appropriate information, but that a structured instruction session on malnutrition and its prevention had a positive impact on their understanding. According to the study's findings, moms of children under the age of five need to be made aware of malnutrition and how to prevent it.

KEYWORDS: Malnutrition, mothers of under five children, structured teaching programme, Knowledge.

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.580| A Monthly Double-Blind Peer Reviewed Journal |

| Volume 10, Issue 3, March 2023 |

| DOI: 10.15680/IJMRSETM.2023.1003029 |

I. INTRODUCTION

Children are a country's most valuable and vital resource because they represent its best hope for future success and production. Growth retardation and malnutrition are likely the most prevalent health and nutritional issues in poor nations like India[1]. When the body does not receive the necessary food nutrients in the proper amounts, malnutrition can result. The vitamins, minerals, proteins, carbohydrates, fats, and lipids found in these foods are necessary for maintaining healthy tissues and organ functions.[2]

Malnutrition can also happen when a person's diet does not contain enough calories and proteins for maintenance and growth, or when they are ill and unable to effectively utilise the food they eat (under nutrition), while people with over nutrition consume excessive amounts of calories. A healthy diet guarantees a long and productive life.[3] Malnutrition can also lead to other issues such as low birth weight, weakened immunity, illnesses including anaemia, and problems with neonatal development during pregnancy and after birth for both the mother and the child. Supplemental vitamin and mineral consumption for kids should be increased.[4] The most fatal type of malnutrition, protein energy malnutrition, is most common in children under the age of five. It contributes significantly to childhood morbidity and death in addition to permanently impairing survivors' ability to grow physically and probably mentally. They are more prone to illnesses, including sepsis, pneumonia, and gastroenteritis.[1] Malnutrition due to a lack of vitamins and minerals causes it when any or all nutrients and micronutrients are deficient.]5]

Mothers frequently are unaware of the locally accessible, inexpensive, seasonal foods that can help them achieve their daily protein and calorie needs and are excellent sources of a variety of nutrients. The issue of malnutrition may be greatly reduced by educating moms and making them aware of certain nutritional products.[6]

II. NEED FOR THE STUDY

One of the leading causes of disease and mortality among children worldwide is still malnutrition. 60% of the 10.9 million deaths of children under five each year are caused, directly or indirectly, by malnutrition. The first year of life sees more than two-thirds of these deaths, which are frequently linked to improper feeding techniques. Most growth retardation starts by the age of two, and the majority of the harm is permanent. The root cause of undernutrition causes more than 3.5 million children under five to pass away needlessly every year in Asia, and millions more suffer from physical and mental disabilities as a result of inadequate nutrition during the first few months of life. If children are malnourished by the time they turn two, they may have irreparable physical and cognitive damage, which may affect their future health, financial security, and wellbeing.[7]

India is placed 15th among the top countries with the worst hunger conditions according to the 2011 Global Hunger Index (GHI) Report. It also lists India as one of the three nations where the global hunger index increased from 22.9 to 23.7 between 1996 and 2011, while 78 of the 81 developing nations studied, including Pakistan, Nepal, Bangladesh, Vietnam, Kenya, Nigeria, Myanmar, Uganda, Zimbabwe, and Malawi, were able to improve the situation with regard to hunger.[8]

India is home to 35% of the developing world's low birth weight infants and 40% of the world's malnourished youngsters (IFPRI 2008). According to UNICEF 2009, 2 million children die in India each year, making up one in every five child fatalities worldwide. India is ranked 117th out of 119 nations in terms of child malnutrition, according to the IFPRI-developed global hunger index (GHI). [9] One in six Indian children (16%) and nearly half of all youngsters (46%) are underweight. Rural areas have substantially greater rates of undernutrition than metropolitan areas do. Bihar, Uttar Pradesh, Madhya Pradesh, and Rajasthan are the states with the highest rates of undernutrition.[10]

The mother is the one who cares for the child, thus it is crucial that she is knowledgeable about how to care for children under five and the nourishment they require. Children under five are defined as being "age in-between 0-5 years of child." Physical activity and a healthy diet are crucial for a child's growth and development. It's crucial that children are exposed to foods and eating habits that encourage favourable attitudes towards good nutrition from an early age in order to aid in the development of healthy eating habits.[11]

In order to maintain the children's nutritional status, moms' knowledge is crucial. So, it is important to maintain children's health and nutrition in order to create a strong foundation and stable future for any civilization. It is believed that a nurse, who is a trained professional, can help in this situation by educating moms of children under the age of five. In light of the aforementioned circumstance, a study was carried out to evaluate the efficacy of a structured training programme on mothers of children under the age of five's understanding of malnutrition and its prevention.

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.580| A Monthly Double-Blind Peer Reviewed Journal |

| Volume 10, Issue 3, March 2023 |

| DOI: 10.15680/IJMRSETM.2023.1003029 |

III. OBJECTIVES

1. To assess the pre test level of knowledge regarding malnutrition and its prevention among the mothers of under five children.
2. To determine the effectiveness of structured teaching programme on knowledge regarding malnutrition and its prevention among the mothers of under five children.
3. To find the association between pre-test knowledge scores regarding malnutrition and its prevention with selected demographic variables.

HYPOTHESIS

H_1: There will be significant difference between pre-test and post-test level of knowledge scores of mothers of under five children regarding malnutrition and its prevention.

H_2: There will be significant association between the pre-test knowledge scores and selected demographic variables.

IV. METHODOLOGY

A pre experimental study was conducted among 60 mothers of under five chidlren who were selected by non-probability purposive sampling technique. The study was conducted in Betahalli and Machohalli village area, Bangalore. In this study, knowledge of mothers of under five children regarding malnutrition and its prevention is the dependent variable**,** the structure teaching programme regarding malnutrition and its prevention is the independent variable and demographic variables are age, religion, education, occupation, monthly family income, number of under five children, type of family, source of information. Data was collected through demographic proforma, and structured knowledge questionnaire conists of 50 questionnaire. A structured teaching programme was provided on knowledge regarding malnutrition and its prevention to the mothers of under five children. The pretest and post test data was collected, analysed and interpreted based on descriptive and inferential statistics.

V. RESULTS

Table 1: Frequency and percentage distribution of mothers of under five children according to the demographic variables. n=60

Demographic variable		No. of mothers (n)	ntage (%)
Age in years	21 – 30	20	33.3
	31 – 40	28	46.7
	41 – 50	12	20
Religion	Hindu	32	53.3
	Muslim	22	36.7
	Christian	6	10
	Others	0	0
Education	Primary school	4	6.7
	Higher primary school	10	16.7
	High school	17	28.3
	PUC	21	35
	Degree and above	8	13.3
Occupation	Housewife	38	63.3
	Private employee	3	5
	Government employee	10	16.7
	Self employed	9	15
Family monthly income in rupees	≤ 5000	12	20

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.580| A Monthly Double-Blind Peer Reviewed Journal |

| Volume 10, Issue 3, March 2023 |

| DOI: 10.15680/IJMRSETM.2023.1003029 |

	500 – 10000	23	38.3
	10001 – 15000	14	23.3
	≥ 15001	11	18.3
Type of family	Nuclear	27	45
	Joint	21	35
	Extended	12	20
r	One	35	58.3
	Two	18	30
	Three or more	7	11.7
Source of information	Family/friends	38	63.3
	Mass media	8	13.3
	Health personnel	14	23.4
	Others	0	0

Table 2: Pre-test knowledge level of mothers of under five children. n=60

Level of knowledge	Numbers of respondents	Percentage (%)
Inadequate	33	55%
Moderate	27	45%
Adequate	0	0
Total	**60**	**100**

Table 3: Post-test knowledge level of mothers of under five children n=60

Level of knowledge	Numbers of respondents	Percentage (%)
Adequate	27	45
Moderate	28	46.67
Inadequate	5	8.33
Total	**60**	**100**

Table 4: Comparison of pre test & post-test knowledge scores of mothers of under five children

n=60

Test	mum Score	in Score obtained	ax Score obtained	Respondents knowledge		
				Mean	SD	Mean %
Pre test	32	8	29	17.05	4.62	34.1
Post test	32	12	43	31.91	7.79	63.82

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.580| A Monthly Double-Blind Peer Reviewed Journal |

| Volume 10, Issue 3, March 2023 |

| DOI: 10.15680/IJMRSETM.2023.1003029 |

Table 5: Effectiveness of structured teaching programme on malnutrition and its prevention among mothers of under five children n=60

Test	Mean	SD	Standard error mean	Mean difference	Knowledge Enhancement	't' value
Pre test						
Post test	14.87	8.65	1.11	14.86	34.72%	13.30 S

't' (tab59=1.6711) p<0.05 S- significant.

Table 6: Comparison of area wise pre test & post-test knowledge scores of mothers of under five children n=60

Sl. No	Area	Knowledge scores							't' value
		Pre test (X)			Post test (Y)			Enhancement	
		Mean	SD	Mean%	Mean	SD	Mean%		
1	Meaning, importance & source of nutrients	5.73	2.23	33.70	11.3	3.49	66.47	32.77	11.76
2	Malnutrition, causes & manifestations	4.95	2.47	33	9.23	3.42	61.53	28.53	9.10
3	Treatment, prevention & control	6.36	2.45	35.33	11.38	3.63	63.22	27.89	8.56

't' (tab59=1.6711) p<0.05 S- significant.

Table 7: Association between pre-test knowledge scores with selected demographic variables n=60

Demographic variables		Moderately adequate	Inadequate	Chi-square test	Remarks
Age in years	21 – 30	13	7	X^2=3.26 df = 2	NS
	31 – 40	11	17		
	41 – 50	9	3		
Religion	Hindu	18	14	X^2=0.57 df = 2	NS
	Muslim	11	11		
	Christian	4	2		
Education	Higher primary school	6	8	X^2=2.60 df = 3	NS
	High school	8	9		
	PUC	14	7		
	Degree and above	5	3		
	House wife	17	21	X^2= 3.47	
	Private employee	2	1		

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.580| A Monthly Double-Blind Peer Reviewed Journal |

| Volume 10, Issue 3, March 2023 |

| DOI: 10.15680/IJMRSETM.2023.1003029 |

Occupation	Government employee	5	5	df = 3	**NS**
	Self employed	7	2		
Family monthly income in rupees	≤5000	7	5	X^2=3.20 df = 3	**NS**
	5001 – 10000	12	11		
	10001 – 15000	10	4		
	≥ 15001	4	7		
Type of family	Nuclear	16	11	X^2= 0.37 df = 2	**NS**
	Joint	11	10		
	Extended	6	6		
er of under five children	One	18	17	X^2=1.05 df = 2	**NS**
	Two	9	9		
	Three or more	5	2		
Source of information	Family/ friends	22	16	X^2=3.53 df = 2	**NS**
	Mass media	6	2		
	Health personnel	5	9		

['x^2' (df2=5.99), 'x^2' (df3=7.81)] *NS – Not Significant

VI. DISCUSSION

The findings of the present study were discussed under the following objectives.

Objective I: Description of demographic variables of the mothers of under five children.
46.7% of the mothers of under five children were aged between 31-40 years of age, 33.3% of the mothers aged between 21-30 years of age and 20% aged between 41-50 years of age. 53.3% of the mothers were Hindus, 36.7% were Muslims and 10% were Christians. 35% of the mothers were studied PUC, 28.3% were High school, 16.7% were been to higher primary school, 13.3% were Degree and above, and 6.7% were been to primary school. 63.3% of the mothers of under five children were housewives, 16.7% were Government employees, 15% were self employed, and 5% were private employees. 38.3% of the participants family income is 5001-10000 rupees, 23.3% participants income is 10001-15000, 20% participants income is below 5000, and 18.3% of the participant's income is above 15001 rupees. 45% of the mothers were belongs to nuclear family, 35% are in joint family, and 20% in extended family. 58.3% of the mothers were having one under five child, 30% of the mothers having two under five children, and 21.17% were having three or more under five children. 63.3% of the mothers source of information is family and friends, 23.4% of the mothers through health personnel, and 13.3% were through mass media.
The findings of the present study is supported by the study conducted by Tinu Joseph and Sumita H T, in which Majority 48(80%) mothers were Hindus,12(20%) mothers were Muslims, Majority of mothers 47(78.33%) belongs to nuclear family, Majority of mother's occupation were 42(70%) house wife, maximum of mothers 42(70%) monthly family income were Rs.5001 and above, Majority of mothers 29(48.33%) education status was High school education, Majority of children in family were 29(48.66%) one.[12]

Objective II: Assessment of knowledge level of mothers of under five children. This study reveals that majority of the mothers of under five children i.e. 55% were having inadequate knowledge, 45% were having moderate knowledge, and none of the mothers of under five children were having adequate knowledge regarding malnutrition and its prevention in the pre test. In the post test 46.67% were having moderate knowledge, 45% were having adequate knowledge and only 8.33% of the mothers were having inadequate knowledge after administration of structure teaching programme regarding malnutrition and its prevention.

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.580| A Monthly Double-Blind Peer Reviewed Journal |

| Volume 10, Issue 3, March 2023 |

| DOI: 10.15680/IJMRSETM.2023.1003029 |

The findings of the present study is supported by the study conducted by Deepak et al, in which 30% of the mothers had moderate knowledge, 70% had inadequate knowledge in the pre test. In post test 56.7% of the mothers were having adequate knowledge, 38.3% were having moderate knowledge, and only 5% had inadequate knowledge after administration of self instructional module on protein energy malnutrition and its prevention.[13]

Objective III: Effectiveness of structure teaching programme. The knowledge score of the mothers of under five children regarding malnutrition and it 's prevention in pre-test and post-test reveals that, post-test mean knowledge score found higher i.e., 31.91(63.82%) and SD of 7.79, when compared to pre-test mean knowledge score value which was 17.05 (34.1%) with SD of 4.62. The total difference in the overall mean knowledge score was 14.86 with the calculated 't' value of 13.30 (table value=1.6711) and found to be significant at the level of $p<0.05$. It means there is significant difference between pre test and post test level of knowledge scores of mothers of under five children regarding malnutrition and its prevention.

Present study also reveals that the calculated 't' value in all the areas is higher than the table value (t=1.6711) at $p<0.05$ level of significance. It implies that the mean post-test knowledge score is significantly higher than the mean pre-test knowledge score in all the areas.

In the area of 'Meaning, importance & source of nutrients' the pre-test mean knowledge scores was 33.70% (5.73±2.23) where as in post-test, the mean knowledge scores was 66.47% (11.3±3.49) with an enhancement of 32.77% in the knowledge scores.

In the area of 'Malnutrition, causes & manifestations' the pre-test mean knowledge scores was 33% (4.95±2.47) where as in post-test, the mean knowledge scores was 61.53% (9.23±3.42) with an enhancement of 28.53% in the knowledge scores.

The pre-test mean knowledge scores in the area of 'treatment, prevention & control' was 35.33% (6.36±2.45) where as in post-test, the mean knowledge scores was 63.22% (11.38±3.63) with an enhancement of 27.89% in the knowledge scores.

The above findings of the present study shows that the structure teaching programme regarding malnutrition and its prevention was effective in improving the knowledge of the mothers of under five children.

The present study findings are supported by the study conducted by Gangadhar et al on effectiveness of structure teaching programme on malnutrition among mother of under five children. The study findings shows that mean of pre test was 15.35, median 16, standard deviation 3.7 and post test mean 23.9, median 24, standard deviation 2.37, the calculated t value was 33.16 which shown that the STP was effective.[14]

Objective IV: Association between pre test knowledge scores and the selected demographic variables. Chi-square test was done to analyze the association between the pre test knowledge scores and the selected demographic variables. The study findings show that, there is no association between the pre test knowledge scores and selected demographic variables.

VII. CONCLUSION

The focus of this study was to assess the effectiveness of structured teaching programme on knowledge regarding malnutrition and its prevention among the mothers of under five children in selected rural areas at Bangalore. A pre-experimental design and evaluative approach was used in the study. The data was collected from 60 mothers of under five children through purposive sampling technique. The data collected was subjected to analysis using descriptive statistics in terms of frequencies, percentage and inferential statistics like paried't' test and chi square test to find the association.

IMPLICATION OF THE STUDY

Nursing Education: The findings of the study indicated that more emphasis should be placed in the nursing curriculum about prevention and control of malnutrition. Structure teaching programme can be used to reinforce learning needs of the mothers' knowledge. Students can be motivated to teach the mothers about the prevention and control of malnutrition. In future nurses themselves will become more knowledgeable and it can be helpful to themselves and as nurse to the others. Varied type of audio-visual aids regarding the programme should be prepared. In-service and continuing education programme may be conducted for the staff to enhance the knowledge on malnutrition and its prevention.

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.580| A Monthly Double-Blind Peer Reviewed Journal |

| Volume 10, Issue 3, March 2023 |

| DOI: 10.15680/IJMRSETM.2023.1003029 |

Nursing Practice: The study results show positive impact on structure teaching health programme. Hence, nurses may adopt the health education module to educate the mothers about malnutrition and its prevention. They can also impart the knowledge to the care givers regarding do's and don'ts of feeding practices which lead to the occurrence of Malnutrition and can educate the mothers regarding its prevention and control

Nursing Administration: Nurse as an administrator can plan and organize educational program. Administrators of rural health services should supervise and guide the health workers to work effectively and efficiently for the prevention and control of Malnutrition. Nurse administrator can organize in- service education program for the nurses to abreast their knowledge on Malnutrition and its prevention.

Nursing Research:
Research studies may be conducted continuously on prevalence of malnutrition which adds to the nursing body of knowledge. Based on the study results the mothers can be educated based on their learning needs. Dissemination of research knowledge helps to improve the general health status of the children there by reduces mortality and morbidity among them in turn enhances the strength of Nation.

LIMITATIONS OF THE STUDY

1. The study made use of purposive sampling technique. Hence it limits the general ability of the study findings to the selected population only
2. The study did not use any control group. The investigator had no control over the events that took place between pre-test and post-test
3. The knowledge questionnaire is used for data collection, which restricted the amount of information that could be obtained from the mothers of under five children

MAJOR RECOMMENDATIONS

Keeping in view the findings of the present study, the following recommendations were made. Since this study was carried out on a small convenient sample, the results can be used only as a guide for further studies.

1. A similar study can be done on a large population and a different tool
2. The similar study could be done in a different setting
3. Experimental study could be done on this problem by using various other teaching programme
4. The attitude and practice can also be assessed
5. Comparative study can be conducted among rural and urban mothers.
6. A similar study can be conducted with two groups.

SUMMARY

The present study in short gave the researcher a new experience a chance to widen the knowledge and a venue to interact with mothers of under five children. The direction from the guide, various experts, and cooperation of the mothers played a major role in successful completion of the present study. The experience gained during this study will motivate the investigator to take up further studies in the future.

REFERENCES

1. Dr. Swaminathan. Text book of principles of nutrition and dietetics. 2nd ed. Bangalore: Bappco limited; 1993.
2. William Blake. Malnutrition a cause for concern in Africa and the world at large. New Jerssy: Minache printing house; 2006.
3. Hossain M, Massan MQ, Rahman MH, Kabir AR. Hospital Management of Severely Malnourished Children: Comparison of Locally Adapted Protocol with WHO Protocol. Ind. Pediatr [serial online]. 2009 [cited 2018 May 19]; 46: 213-217. Available from: http://www.ncbi.nlm.nih.gov/pub medhealth/PM0001441/
4. Anderson AS, Anil Ray. Pregnancy as a time for dietary change? proc Nutrition Soc [serial online]. 2001 [cited 2018 Apr 3]; 60:497-504.avialble from: https://www.cambridge.org/core/journals/proceedings-of-the-nutrition-
5. society/article/pregnancy-as-a-time-for-dietary-
6. change/C684676858D8EA1B11178D5F2F3EF1C3

| ISSN: 2395-7639 | www.ijmrsetm.com | Impact Factor: 7.580| A Monthly Double-Blind Peer Reviewed Journal |

| Volume 10, Issue 3, March 2023 |

| DOI: 10.15680/IJMRSETM.2023.1003029 |

7. World Health organization. WHO child growth standards, length/height- for age, weight- for-age, and weight –for length, weight –for height and body mass index- for – age.methods and development. WHO multicenter Growth Reference study group. Geneva: WHO; 2006.
8. Mishra A, Bhardwaj UD, Rani S. Knowledge regarding Malnutrition and Its Prevention – A Study on Slum Dwelling Mothers. Int J Nurs Midwif Res [serial online]. 2017 [cited 2018 Jan 9]; 4(2):32-37. Available from: https://medical. adrpublications.in/index.php/IntlJ-
9. Nursing and MidwiferyRes/ article/view/1165
10. Sule SS, Onayade AA, Abiona TC. Impact of nutritional education on nutritional status of under-five children in two rural communities of south-west Nigeria. Nigeria Niger Postgrad Med J [serial online]. 2009 [cited 2017 May 17]; 16(2): 115-125. Available from: https://www.ncbi.nlm.nih.gov/pubmed/19606191
11. World Bank Report. Source: The World Bank (2009). Retrieved 2017-05-24. World Bank Report on Malnutrition in India.
12. Sohi D. Textbook of nutrition. Iodine deficiency. 5thed. Jalandhar: Medical Publishers; 2008.
13. Jayashree Nandi. Malnutrition nation's biggest health hazard. The times of India [online news paper]. 15 Nov 2017 [cited 2018 Mar 7]; [about 2 screens]. Available from: https://www.pressreader.com/india/the-times-of-india-new-delhi-
14. edition/20171115/281968902975282
15. Pramod Singh GC, Nair M, Grubesic RB, Connell FA. Factors associated with underweight and stunting among children in rural Terai of eastern Nepal. Asia Pac J Public Health [serial online]. 2009 [cited 2017 May 19]; 21(2): 144-152. Available from: https://www.ncbi.nlm.nih.gov/pubmed/19251720
16. Joseph T, Tata SH. A study to assess the effectiveness of health education programme on knowledge regarding control and prevention of protein energy malnutrition among mothers of under five children from selected Anganwadies, Karad Taluka. International Journal of Science and Research [serial online]. 2014 July [cited 2018 Mar 21]; 3(7): 2208-2212. Available from: https://www.ijsr.net/archive/v3i7/MDIwMTQxMjk2.pdf
17. BV Deepak, Deepak Y, Khandelwal B. Protein energy malnutrition and its prevention among mothers of toddlers. International Journal of Pediatric Nursing [serial online]. 2016 [cited 2018 May 18; 3(1):23-25. Available from: http://mcmed.us/downloads/146967256123-25.pdf
18. Gangadhar. S. Isarannavar et al. Effectiveness of Structured Teaching Programme on Malnutrition and the Preparation of Hydrabadi and Davanagere Mix Recipe among Mothers of under Five Children in Selected Anganwadi centre of Hattikeri P. H. C., Ankola (U.K.), Karnataka. International Journal of Science and Healthcare Research [serial online]. 2017 Jun [cited 2018 May 17]; 2(2): 42-45. Available from: http://ijshr.com/IJSHR_Vol.2_Issue.2_April2017/IJSHR006.pdf.

Impact Factor: 7.580

INTERNATIONAL JOURNAL
OF MULTIDISCIPLINARY RESEARCH
IN SCIENCE, ENGINEERING, TECHNOLOGY AND MANAGEMENT

+91 99405 72462 +91 63819 07438 ijmrsetm@gmail.com