

Knowledge Among Mothers of Under Five Children Regarding Severe Acute Malnutrition to Develop Health Education Pamphlet

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ABSTRACT:

OBJECTIVES: 1.To assess the knowledge among mothers of under five children regarding severe acute malnutrition at selected rural community Tumkur.2.To find out an association between the level of knowledge of mothers of under five children with their selected demographic variables.3. To prepare and distribute health education pamphlet regarding severe acute malnutrition prevention and its management.

METHODOLOGY: The research design selected for the present study is a Non experimental descriptive study design. The subjects are randomly assigned. The pretest was done and the pamphlets were distributed. Evaluative approach, Descriptive research design was used, with convenient sampling technique. The data was collected from 100 mothers of under-five children. The pre-test knowledge was assessed through knowledge questionnaire. **RESULTS:** The overall scores show that majority 99% of the mothers of under-five children had inadequate knowledge and 1% of the mothers of under-five Children had moderate knowledge regarding severe acute malnutrition in the pretest and the health education pamphlet was been developed. **CONCLUSION:** This study reveals that majority of the respondents had inadequate knowledge in pre-test regarding severe acute malnutrition. The following conclusions were drawn based on the current study. There is lack of knowledge among mothers of under-five children regarding severe acute malnutrition. Based on the pre-test knowledge score the health education pamphlet was developed and distributed among mothers of under-five children.

KEYWORDS: Under-five children, severe acute malnutrition, health education pamphlet.

INTRODUCTION

Severe acute malnutrition is defined by a very low weight for height (below 3z scores of the median who growth standards), or mid upper arm circumference <115mm, or by the presence of nutritional edema. Severe acute malnutrition is both a medical and social disorder. According to World Health Organization, severe acute malnutrition (SAM) refers to “an imbalance between the supply of protein and energy and the body's demand for them to ensure optimal growth and function” It is a major public health problem in India. It affects particularly the preschool children (< 5 years) with its dire consequences ranging from physical to cognitive growth and susceptibility to infection. This affects the child at the most crucial period of time of development which can lead to permanent impairment in later life¹.

In India are severely acute malnourished, with the most in Uttar Pradesh followed by Bihar, we estimate

the global annual SAM incidence rate as a share of the under five population to be 4.3% compared to a prevalence estimate of 2.5% south Asia is the region with the highest incidence rate (6.8%) followed closely by the middle east and north Africa (5.7%) and SSA (5.0%). SAM is measured in terms of underweight (low weight for age), stunting (low height for age) and wasting (low weight for height). The prevalence of stunting among under five is 48% (moderate and severe) and wasting is 20% (moderate and severe) and with an underweight prevalence of 43% (moderate and severe), it is the highest in the world².

The majority of children suffering from under nutrition (80%) are the mild and the moderate forms which go unnoticed and the early ages are affected more which makes the process irreversible. In comparison to the global reference standards, the weight for distribution of Indian children falls to the left of the curve. Under nutrition makes the child susceptible to infection and complements its effect in contributing to child mortality. This accounts for 22% of the burden of disease in India and adversely affects the economic growth of the country with an estimated adult productivity loss of 1.4% of gross domestic product (GDP)³.

In order to ensure that adequate amount of food is available to the household, it is necessary for the family to be food secure. The National Food Security Bill, 2010 Launched by the Government of India is a step forward in sustaining food availability to marginalized groups who are at a vulnerable position to be worst hit by food insecurity. According to the bill, “legal entitlement to subsidized food grains to be extended to at least 75% of the country's population 90% in rural areas and 50% in urban areas” It is seen that food unavailability⁴.

With an annual per capita growth rate of 3% (1990-2002), the reduction in underweight prevalence to 39% among children under three is estimated by the year 2015, but is “still short of the MDG” and even if India achieves the MDG goal, the prevalence will still be higher than the Sub Saharan African region. SAM is a critical problem with many determinants playing a role in causing this vicious cycle causation of SAM using the Lalonde model, the life expectancy of the population around the world is estimated to be 75-80 years. Today, there are over 200 million malnutrition worldwide and 40 million in India. The children are expected to increase 1200 million, by the year 2020 AD⁵.

OBJECTIVES:

1. To assess the knowledge among mothers of under five children regarding severe acute malnutrition at selected rural community Tumkur.
2. To find out an association between the level of knowledge of mothers of under five children with their selected demographic variables.
3. To prepare and distribute health education pamphlet regarding severe acute malnutrition prevention and its management.

HYPOTHESIS:

H₀- There will be no adequate knowledge of mothers of under five children regarding severe acute malnutrition

H₁: There is a significant association between knowledge of mothers of under five children regarding severe acute malnutrition with their selected socio demographic variables.

METHODOLOGY:

MATERIALS AND MEATHODS:

Approach: Descriptive Research approach was used for this study.

Study Design:

The research design used for the present study was Descriptive design.

O: Pre-test to assess level of knowledge regarding severe acute malnutrition among mothers of under five children

Variables:

Dependent variable: level of knowledge regarding severe acute malnutrition among mothers of under five children

Population:

The Population of the study comprises of mothers of under five children

Setting and Sample:

In present study, 100 mothers of under five children were selected from Tumkur

Sampling technique

In present study, Purposive sampling technique

RESULTS:

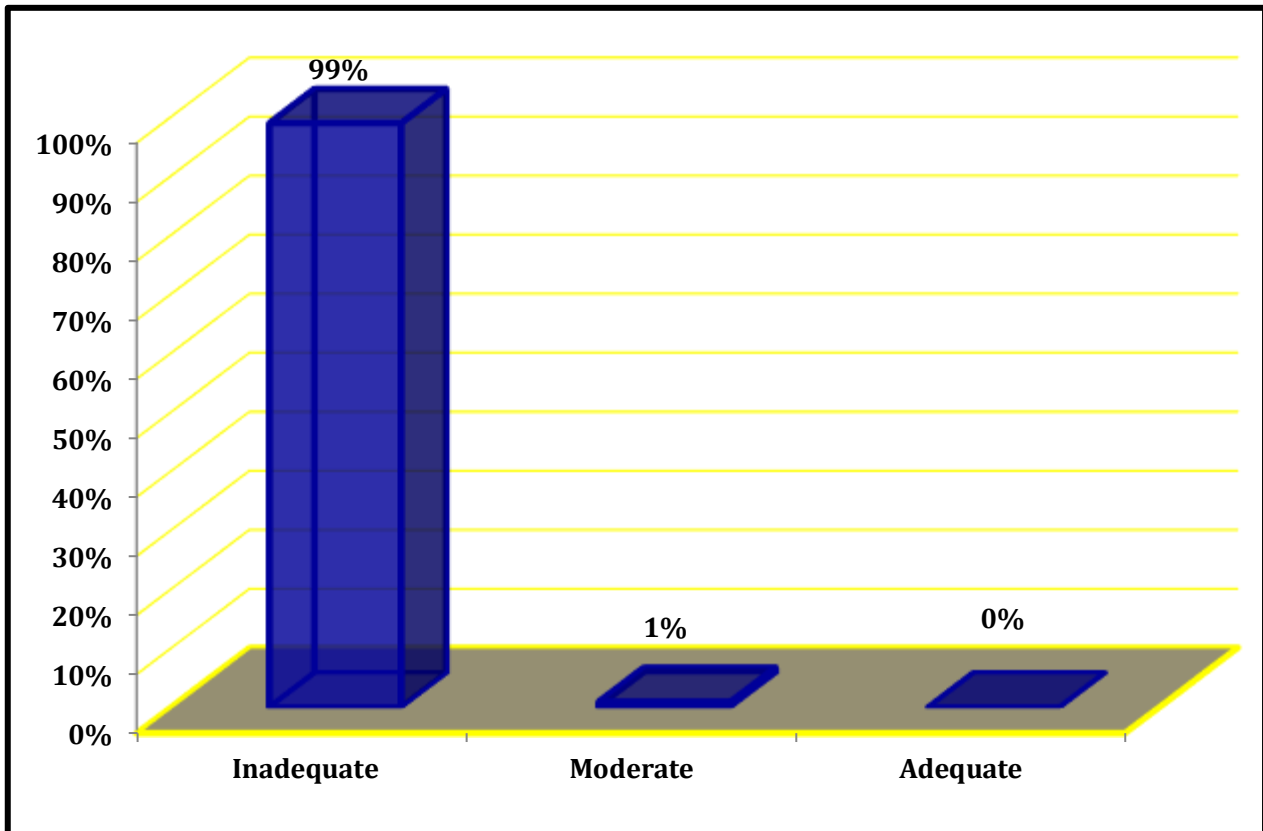
Description of demographic variables

It was observed that majority 46% of subjects were in the age group of 18 - 21 years, 33% of subjects were in the age group 22 –26 years, 13% of subjects were in the age group 27 – 31 years and 8% of subjects were in the age group 32 – 36 years. It was observed that 73% of the subjects were Hindu and 21% of the subjects were Muslim and 6% of the subjects were Christian. It was seen that, most of the study samples i.e. 81% belongs to Nuclear Family, 13% belongs to Joint family and 6% belongs to Extended family. It was seen that 51% of the mothers have only one child, 33% of the mothers have two children, 14% of the mothers have three children and 2% of the mothers have more than three children. It was showed that that the 53 % of subjects had secondary education, 38% has no formal education, 5% of the subjects were primarily educated, 20% and 4% of the subjects were graduate and above. It was revealed that the 82% of the subjects were homemakers, 13% of the subjects are self-employed, 1% of the subject was government employee and 3% of the subjects were private employees. It was observed that that the 51% of subjects had the monthly income of Rs.10,001-15,001/- 23% of subjects had the monthly income of Rs. 5,001/-10,001/-, 16% of subjects had the monthly income of Rs. 15,001/-20,001/- and 10% of the subjects had the monthly income of Rs.21,001 and above. It was revealed that, majority 61% of the subjects do not get information by any sources, 18% of subjects were provided information by Family friends, 12% of subjects provide information by Mass media and 9% of the subjects were getting information by Health personnel's.

TABLE 1: Knowledge scores of mothers of under five children regarding acute severe Malnutrition n=100

knowledge level	Pre test	
	Frequency (f)	Percentage (%)
a. Inadequate	99	99%

b. Moderate	1	1%
c. Adequate	0	0%
TOTAL	100	100%



Graph 1: The column graph represents the mean percentage of the subjects according to their pre-test level of knowledge scores

The above table & graph shows that 99% of the mothers of under five children had inadequate knowledge regarding severe acute malnutrition and 1% of the mothers of under five children had moderate knowledge regarding severe acute malnutrition.

TABLE 2: ASSOCIATION BETWEEN KNOWLEDGE LEVELS WITH THEIR SELECTED DEMOGRAPHIC VARIABLES AMONG MOTHERS OF UNDER FIVE CHILDREN
n=100

Socio-demographic variables	Adequate		Moderate		Inadequate		n	Table value	df	X ²
	f	%	f	%	F	%				
Age in years										
18 - 21 years	0	0	1	1	45	45	46	t=12.59	6	x ² =0.8 (NS)
22 –26 years	0	0	0	0	33	33	33			
27 – 31 years	0	0	0	0	13	13	13			
32 – 36 years	0	0	0	0	8	8	8			
Religion										
Hindu	0	0	2	2	71	71	73	t=12.59	6	x ² = 0.38 (NS)

Muslim	0	0	1	1	20	20	21			
Christian	0	0	0	0	6	6	6			
Others	0	0	0	0	0	0	0			
Type of Family										
Nuclear Family	0	0	4	4	77	77	81	t=9.48	4	x ² = 14.62 (S)
Joint Family	0	0	3	3	10	10	13			
Extended Family	0	0	0	0	6	6	6			
Number of Children										
1 Child	0	0	0	0	51	51	51	t=12.59	6	x ² = 0.37 (NS)
2 Children	0	0	0	0	33	33	33			
3 Children	0	0	1	1	13	13	14			
More than 3 Children	0	0	0	0	2	2	2			
Educational status										
Primary education	0	0	4	4	1	1	5	t=12.59	6	x ² = 100.08 (S)
Secondary education	0	0	3	3	50	50	53			
Graduation and above	0	0	4	4	0	0	4			
Non formal education	0	0	0	0	38	38	38			
Occupation										
Home Maker	0	0	2	2	80	80	82	t=12.59	6	x ² = 12.12 (NS)
Self-employee	0	0	1	1	12	12	13			
Government employee	0	0	1	1	1	1	2			
Private employee	0	0	1	1	2	2	3			
Monthly Income										
Rs 5001-10,000/-	0	0	0	0	23	23	23	t=12.59	6	x ² = 0 (NS)
Rs 10,001-15,000/-	0	0	1	1	50	50	51			
Rs 15001-20,000/-	0	0	0	0	16	16	16			
Rs 21,000/- and above	0	0	1	1	9	9	10			
Source of health information										
Family friends	0	0	3	3	15	15	18	t=12.59	6	x ² = 25.34 (S)
Mass media	0	0	2	2	10	10	12			
Health Personnel	0	0	0	0	9	9	9			
No information	0	0	1	1	60	60	61			

The significant association was not found between the knowledge level with their selected demographic variable at 0.05 level of significance in case of type of family, educational status and sources of health information regarding severe acute malnutrition. The stated H_1 has been accepted in case of these variables.

DISCUSSION:

The present study confirms that overall mean knowledge in pre-test shows there is inadequate information among the mothers of under-five children regarding severe acute malnutrition. 99% of the participants had inadequate knowledge, 1% of the participants had Moderate knowledge and none of the participants had adequate knowledge regarding severe acute malnutrition. Hence it is necessary to develop a health education pamphlet regarding severe acute malnutrition. Among socio-demographic variables analyzed in this study was there is association between selected variables such as type of family, educational status and source of health information, and hence H_1 was accepted.

CONCLUSION:

Severe acute malnutrition is defined by a very low weight for height (below 3z scores of the median who growth standards), or mid upper arm circumference <115mm, or by the presence of nutritional edema. Severe acute malnutrition is both a medical and social disorder. This study reveals that majority of the respondents had inadequate knowledge in pre-test regarding severe acute malnutrition. The following conclusion was drawn based on the current study. There is lack of knowledge among mothers of under-five children regarding severe acute malnutrition. Based on the pre-test knowledge score the health education pamphlet was developed and distributed among mothers of under-five children.

RECOMMENDATIONS

- A similar study can be conducted on a large sample to validate and generalize the study findings.
- A comparative study can also be done to compare the effect of structured teaching program with other methods like booklet, mother to mother approach etc.
- A similar study can be conducted by using experimental and control group.
- Educational program can be designed to create awareness among mothers of under five children.

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