

# Knowledge Regarding Severe Acute Malnutrition (SAM) Among Mothers Of Under Five Children With A View To Develop A Handbook.

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ARTICLE INFO	ABSTRACT
	<p>Malnutrition is a major public health problem all over the developing world and is an underlying factor in over 50% of the 10-11 million children under 5 years of age who die each year of preventable causes. Severe acute malnutrition is an extremely common disorder, associated with high rates of mortality and morbidity requiring specialized treatment and prevention intervention.</p> <p><b>Aim:</b> Assess the level of knowledge regarding severe acute malnutrition (SAM) among mothers of under five children in selected rural area of Raigad district.</p> <p><b>Methodology:</b> This Non- experimental descriptive research design involved 300 mothers of under five children using a self structured questionnaire to assess knowledge regarding severe acute malnutrition among mothers of under five children.</p> <p><b>Result:</b> A total of 300 mothers of under five children participated in the study, out of the total participants 56.7% have poor knowledge regarding severe acute malnutrition, poor knowledge score associated with education, occupation, type of family, monthly income, number of children, previous knowledge and source of information at P- value&lt;0.05 significance level, and there is an association with demographic variables.</p> <p><b>Conclusion:</b> On the basis of the findings of the present study it is concluded that majority of the mothers of under five children in rural area having poor knowledge regarding severe acute malnutrition and for controlling and reducing childhood malnutrition, more emphasis should be given to women's knowledge and practice of parents on suitable infant and young child nutrition and caring practice.</p> <p><b>Keywords:</b> Knowledge, Severe acute malnutrition, Mothers of under five children, Handbook</p>

## 1. INTRODUCTION

Under nutrition is one of the leading causes of morbidity and mortality in children under the age of 5 years in developing countries. Severe acute malnutrition still a major health hazard to children, as the mortality rates among severe acute malnutrition children are nine times higher than those in well nourished children. Every 3<sup>rd</sup> malnourished child in the world lives in India. Worldwide around 20 million children under 5 years of age have severe acute malnutrition and 40 percent of these (8 million) are in India.

Severe acute malnutrition is defined by a very low weight for height (below -3 weight for height z scores of the median WHO growth standards), by visible severe wasting, or by the presence of nutritional oedema. Decreasing child mortality and improving maternal health depend heavily on reducing malnutrition, which is responsible, directly or indirectly, for 35% of deaths among children under five.

It is estimated that one third of the world's children who have muscle wasted, lives in India. A study done in Bihar on less than 5 year children reveals 28.7% are under category of muscle wasting and 8.3% have diagnosed with severe acute malnutrition.

A study was conducted by Chetan S Patali, Department of community health Nursing, Rajiv Gandhi University of Health Sciences, Bangalore, Karnataka, in 2018, concluded that there is significant association between knowledge and age, educational and occupation of mother, religion, type of family, total number of under five children in the family, monthly income, and area of residence. Therefore education programme should give

importance to furnish the mothers with adequate knowledge regarding nutrition by this means preventing from risk of nutritional deficiencies.

Malnutrition is an important public health problem in India. Though, relevant information about severe acute malnutrition is very effective. As well as knowledge about infant feeding practice, working status, family beliefs, socioeconomic status, and any underlying infections from which the child may be suffering have impact on overall nutrition and weight gain. To educate the mother regarding the health of her child should be the most important priority. If the mother will have the knowledge she needs to understand all the aspects of her child's health. The care she provides depends on the knowledge of mothers. Mother's knowledge is most important factor for proper growth and development of children.

The most susceptible age for malnutrition is 6 month to 5 year (when growth of the children as well as development of the brain is especially high). In this age group mothers are needed by child as they are first care givers to the children.

## 2. METHODS AND MATERIALS

The study was conducted to assess the knowledge regarding Severe acute malnutrition among mothers of under five children in selected area of Raigarh district with a view to develop a handbook. Non-experimental descriptive research design was used in the study. The population of the current study comprises a total of 300 participants using non- probability convenient sampling techniques. In the present study, the researcher used a self structured questionnaire on demographic characteristics of respondents like age, religion education, occupation, type of family, monthly income, number of children and previous knowledge. Section-II deals with 25 items of self structured questionnaire to assess the knowledge regarding severe acute malnutrition among mothers of under five children. Through the use of questionnaires, data were gathered. Content validity for Handbook is done by 5 experts with 1 CVI score 1.

### *Inclusion criteria:*

- Mothers who can understand Hindi or Marathi, mothers who are available at the time of data collection, and the mothers who has children aged up to 5 years only.

### *Exclusion criteria:*

- Mothers who have undergone same type of study and mother who work as health personnel were excluded from the study.

## 3. RESULTS

### *3.1 Sociodemographic profiles*

The sociodemographic profiles of the study populations are presented in table 1. As per table 1, the majority of the participants (65%) were within 18-25 years of age group, 79.3% participants were Hindus, 73.3% of participants were educated up to the secondary level, 57.3% were unemployed, majority of participants (74%) were belongs to joint family, there were 71% of participant having the monthly income of rupees 11,708-19,515, maximum participants (67%) were having two children, most of them (54%) were having no previous knowledge and 33.7% of participants had some previous knowledge regarding severe acute malnutrition through health personnel.

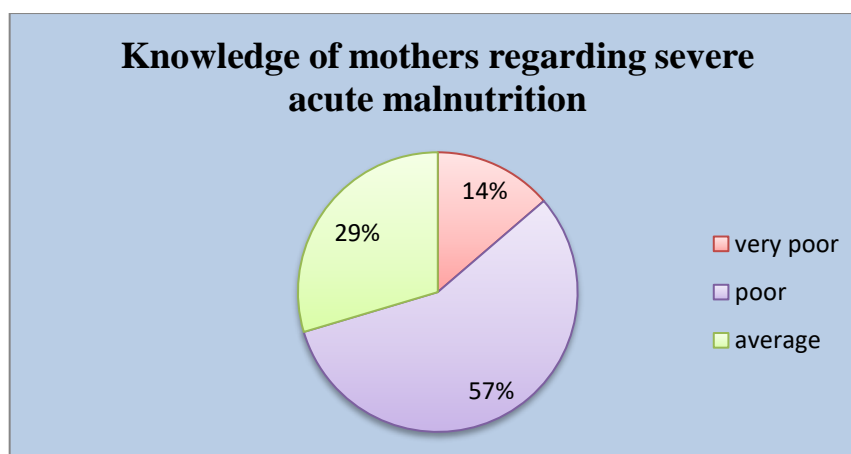
**Table 1: Frequency and percentage distribution of socio demographic profile of participants**

n= 300		
Socio- demographic characteristics	frequency	Percentage
	f	%
<b>Age (years)</b>		
18-25	194	65
26-30	96	32
31-35	9	2
36-40	1	1
<b>Religion</b>		
Hindu	238	79.3
Muslim	54	18
Christian	0	0
Other	8	2.7
<b>Education</b>		
Primary	34	11.3
Secondary	220	73.3
Higher secondary	38	12.7

Graduation	8	2.7
<b>Occupation</b>		
House wife	172	57.3
Labourer	73	24.3
Service	12	4
Self employed	43	14.3
<b>Type of family</b>		
Nuclear	222	74
Joint	78	26
Extended	0	0
Separated	0	0
<b>Monthly income of family</b>		
<=3907	6	2
3908-11707	30	10
11708-19515	213	71
>19516	51	17
<b>Total number of children</b>		
One	76	25.3
Two	201	67
Three	23	7.7
Four	0	0
<b>Previous knowledge</b>		
Yes	138	46
No	162	54
<b>Source of information</b>		
Health personnel	101	33.7
Family member	17	5.7
Friends	20	6.7
Multimedia	162	54

### 3.2 Knowledge of mothers regarding severe acute malnutrition

Mothers of under five children were asked about knowledge regarding severe acute malnutrition through self structured questionnaires including general knowledge, risk factors, sign and symptoms, management, prevention and follow up. Figure 1: showed 57% mothers have poor knowledge, 29% of mothers have average knowledge and 14% mothers have very poor knowledge regarding severe acute malnutrition.



**Figure 1: Knowledge of mothers regarding severe acute malnutrition (n=300)**

**Table 2: Association between knowledge score with selected demographic variables**

S.N O.	VARIABLES	LEVEL OF KNOWLEDGE						CHI SQUARE VALUE	Df	P-VALUE	SIGNIFICANT AT 5% LEVEL
1	<b>Age</b>	V. Poor	Poor	Average	Good	V. Good	Total	10.55	6	0.46	Not significant
	18-25	18	123	53	0	0	194				
	25-30	19	44	33	0	0	96				
	30-35	3	3	3	0	0	9				
	35-40	1	0	0	0	0	1				
2	<b>Religion</b>	V. poor	Poor	Average	Good	V. Good	Total	8.22	5	0.47	Not significant
	Hindu	29	149	60	0	0	238				
	Muslim	10	19	25	0	0	54				
	Christian	0	0	0	0	0	0				
	Other	2	2	4	0	0	8				
3	<b>Education</b>	V. poor	Poor	Average	Good	V. Good	Total	19.757	6	0.002	Significant
	Primary	21	11	2	0	0	34				
	Secondary	19	147	54	0	0	220				
	Higher secondary	1	10	27	0	0	38				
	Graduate	0	2	6	0	0	8				
4	<b>Occupation</b>	V. poor	Poor	Average	Good	V. Good	Total	153.4	6	0.003	Significant
	Unemployed	19	139	14	0	0	172				
	Labourer	19	28	26	0	0	73				
	Service	0	0	12	0	0	12				
	Self employed	3	3	37	0	0	43				
5	<b>Type of family</b>	V. poor	Poor	Average	Good	V. Good	Total	12.91	2	0.000	Significant
	Nuclear	20	37	21	0	0	78				
	Joint	21	133	68	0	0	222				
	Extended	0	0	0	0	0	0				
	Separated	0	0	0	0	0	0				
6	<b>Monthly income</b>	V. poor	Poor	Average	Good	V. Good	Total	31.01	6	0.001	Significant
	≤ 3,907 rupees	6	0	0	0	0	0				
	3,908-11,707 rupees	15	8	7	0	0	30				
	11,708-19,515 rupees	16	143	54	0	0	213				
	≥ 19, 516 rupees	4	19	28	0	0	51				

7	<b>Number of children</b>	V. poor	Poor	Average	Good	V. Good	Total	20.82	4	0.003	<b>Significant</b>
	One	26	23	27	0	0	76				
	Two	13	144	44	0	0	201				
	Three	2	3	18	0	0	23				
	Four	0	0	0	0	0	0				
8	<b>Previous knowledge</b>	V. poor	Poor	Average	Good	V. Good	Total	37.94	2	0.002	<b>Significant</b>
	Yes	1	85	52	0	0	138				
	No	40	85	37	0	0	162				
9	<b>Source of information</b>	V. poor	Poor	Average	Good	V. Good	Total	21.52	6	0.000	<b>Significant</b>
	Health personnel	1	63	37	0	0	101				
	Family member	0	15	2	0	0	17				
	Friends	0	0	0	0	0	0				
	Multimedia	0	7	13	0	0	20				

Table 2 reveals the association between knowledge of mothers of under five children with their socio demographic characteristics such as age, religion, education, occupation, type of family, monthly income, number of children, previous knowledge and source of information.

The calculated value of chi square for age (10.55) religion (8.22) were not significant were as education (19.757) occupation (153.4) type of family (12.91) monthly income (31.01) number of children (20.82) previous knowledge (37.94) and source of information (21.52) were significant.

#### 4. Discussion

The findings illustrate that out of total participants, the majority of participants (57%) have poor knowledge regarding severe acute malnutrition. 29% had good knowledge while 14% of participants have very poor knowledge accordingly. A similar study finding showed by Badur Manohar(2017) study in India, that out of 120 mothers 69 (57.5%) have adequate knowledge followed by 36 (30%) have moderately adequate, 15 (12.5%) have inadequate knowledge regarding severe acute malnutrition.

On the basis of the present study result, most of the mothers have poor knowledge and the association between their knowledge and demographic variables of education, ( $p=0.002$ ) occupation ( $p=0.000$ ), type of family ( $p=0.003$ ), number of children ( $p=0.001$ ), previous knowledge ( $p=0.002$ ), source of information ( $p=0.002$ ) conclusion: as according to the findings of the study it is concluded that there was a significant association between knowledge of mothers and selected socio demographic variables like Education, Occupation, Type of family, Number of children, Previous Knowledge, Source of Information. Whereas a similar study was conducted in Saudi Arabia by Anas Abdulrahman and Mujahid Abdulrahman in 2018, to assess the knowledge of mothers about Severe acute malnutrition and associated factors in children. Result of the study reveals that there were several demographics factors that significantly influenced the knowledge of mothers, including age ( $p = 0.008$ ), educational level ( $p = 0.02$ ), monthly income ( $p = 0.001$ ), number of children ( $p = 0.01$ ), breastfeeding ( $p = 0.03$ ), and source of knowledge ( $p = 0.003$ ).]

#### CONCLUSION:

On the basis of the findings of the present study it is concluded that majority of the mothers of under five children in rural area having poor knowledge regarding severe acute malnutrition. Their knowledge score is associated with their demographic characteristics such as education, occupation, type of family, number of children, previous knowledge, source of information etc. It is concluded that to reduce childhood malnutrition more importance should be given to women's knowledge and practice of parents on suitable infant and young child nutrition and caring practice.

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