

**A STUDY TO ASSESS THE KNOWLEDGE OF PARENTS OF UNDER FIVE-YEAR CHILDREN REGARDING PREVENTION OF PROTEIN ENERGY MALNUTRITION IN VIEW TO DEVELOP INFORMATION BOOKLET IN SELECTED AREAS OF COMMUNITY**

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**ABSTRACT**

Under-nutrition is one of the most common causes of morbidity and mortality among children throughout the world, more so in developing nations. Being a major burden of ill health, it has been accountable for 60% of the 10.9 million deaths that occur annually among children under five years of age. The aim of the study is to assess the knowledge level of parents of under five children about prevention of protein energy malnutrition and giving information booklet after assessing their knowledge. Objective: To assess the level of knowledge regarding prevention of protein energy malnutrition among the parents of five-year children in selected areas of community. To find out the association between knowledge of parents of under five-year children with their selected demographic variables. To develop the information booklet on knowledge regarding prevention of protein energy malnutrition. Research methodology: Non-experimental descriptive research design and Quantitative approach and Purposive Sampling Technique were used for this study. The study population were under five-year children's parents in selected area of community with sample size 100. Result: In this study p-values for some demographical variables are large (p value = >0.05) and for the one variable that is small (p value = <0.05). Education variables p value is 0.0122 that is smaller than (p value = <0.05) so education variable is associated with the level of knowledge of parents of under five-year children. Since all the p value are large (p value = >0.05) for the other demographic variables that was found to non-significant association with the knowledge. There is 8% parents having poor knowledge, 51% have Average knowledge And 41% parents having good knowledge. Summary: The present study was designed to assess knowledge of protein energy malnutrition in selected community areas using a knowledge self structured questionnaire and information booklet on prevention of protein energy malnutrition under five year children. Conclusion: It concluded that there was moderate knowledge among the parents of under five children regarding prevention of Protein Energy Malnutrition (PEM). There is need to give the knowledge about PEM to parents to prevent children from malnutrition and further disease which can affect the children's future. We have to give the information regarding the PEM too community people to prevent children's future.

**KEYWORDS:** Assess, knowledge, PEM, Information booklet, Community and Parents.

**INTRODUCTION**

According to World Health Organization, protein energy malnutrition (PEM) 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 (<6 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 life.<sup>[1]</sup>

PEM 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 world. The majority of children suffering from undernutrition (80%) are the mild and the moderate forms which go unnoticed and the early ages are affected more which makes the process irreversible.<sup>[1]</sup>

Globally, PEM continues to be a major health burden in developing countries and the most important risk factor for illnesses and death especially among young children. The World Health Organization estimates that about 60% of all deaths, occurring among children aged less than five years in developing countries, could be attributed to malnutrition.<sup>[2]</sup>

### NEED FOR THE STUDY

The majority of children suffering from undernutrition (80%) are the mild and the moderate forms which go unnoticed and the early ages are affected more which makes the process irreversible.<sup>[4]</sup> The World Health Organization estimates that about 60% of all deaths, occurring among children aged less than five years in developing countries, could be attributed to malnutrition.<sup>[6]</sup>

The prevalence of PEM among children in south Asia is the highest in the world. It is the almost double the prevalence in sub-Saharan Africa. This high prevalence together with the large population of the region explain why more than half of all malnourished children live in south Asia, 101 million out of 184 million. On average there has been a small decrease in the prevalence of underweight children in south Asia during the last fifteen years.<sup>[6]</sup>

In India the people are affected with malnutrition and it is found to be one of the greatest health problems which is being faced by our community today. It is reported that 60-70% of young children today have nutritional deficiency. It is recognized that people in India take diet with minimum proteins requirement and less in sufficient calories. A child becomes malnourished because if illness in combination with inadequate food intake.<sup>[6]</sup>

Malnutrition contributes to over 6 million death of children each year, 55% of the death among children are associated with factors such as social economic and moral aspects the vulnerable period is 4-6 years of life 40% of this age group consume adequate diet. It had been estimated there are about 45 million under nourished children in our country which can lead to nutritional anaemia, and other nutritional deficiencies.<sup>[7]</sup>

### PROBLEM STATEMENT

A study to assess the knowledge of parents of under five-year children regarding prevention of Protein Energy Malnutrition in view to develop information booklet in selected areas of community.

### OBJECTIVES

1. To assess the level of knowledge regarding prevention of protein energy malnutrition among the

parents of five-year children in selected areas of community.

2. To find out the association between knowledge of parents of under five-year children with their selected demographic variables.
3. To develop the information booklet on knowledge regarding prevention of protein energy malnutrition

### METHODOLOGY

#### Approach

The research approach adopted in this study is Quantitative research

#### Research Design

A Descriptive research design is used.

#### Setting of study

Selected rural areas.

#### Duration of study: 15 days.

#### Method of data collection

Written permission was obtained from the college and selected community authorities for conducting pilot and the main study. Written consent was obtained from the study participants. The Data was collected by the Investigator himself.

#### Delimitation

1. The study was conducted among the parents of under five-year children in selected areas of community.
2. The study was conducted among parents of under five-year children who are willing to participate.

#### Sample size: 100.

### CRITERIA FOR SAMPLE SELECTION

1. **Attributed variables:** knowledge regarding PEM
2. **Demographic variables:** Age, Gender, Education, Occupation, Religion, Type of family

#### Inclusion criteria

1. The parents who are willing to participate in the study.
2. The parents who are available at the time of data collection.
3. The parents who have under five-year children.

#### Exclusion criteria

1. Parents who are non-co-operative and non- willing

### METHOD FOR DATA COLLECTION

Approval from the research committee members and written permission from head of institution to conduct research.

- a) After getting ethical clearance authority's permission was obtained [Sarpanch/ Gram Sewak]
- b) Explain the purpose of the research to the samples.
- c) Obtain informed consent from samples.

**Study instrument/ data collection tool**

The following sections consists of

**Section A:** Consent form

**Section B: Demographic variables**

**Section C: Knowledge questionnaires to assess the level of knowledge.**

**Data collection procedure**

A formal permission was obtained from the concerned authorities. The investigator introduced self and sample about the nature of study, purpose, objective, role of participant so as to ensure better co-operation during the data collection. Objectives of study were discussed and consent was obtained for participating in study. Subject were assured that the confidentiality of the data. Each subject was given self structured questionnaire to assess the knowledge about PEM among Parents of under five-year children.

**Plan for data analysis**

The collected data was coded, tabulated and analysed by using descriptive statistics (mean, percentage, standard deviation). The researcher planned to analyse the data in the following manner. Analysis is the process of organizing and synthesizing the data so as to answer research question. Before starting data analysis, the researcher taken out consent form from the tool the for the purpose of confidentiality. The data analysis was planned to include descriptive and inferential statistics.

Data analysed under the following sections.

**Section I-** Description of samples based on their personal characteristic

**Section II-** Analysis of data related to level of knowledge among parents of under five-year children in selected areas.

**Section III** – Analysis of data related to the association of knowledge of parents with their demographic variable

**Pilot study**

**Table 1: Description of samples (Parents of under five-year children) based on their personal characteristics. n=100**

Demographic variable	Frequency	Percentage
<b>Age</b>		
20-25years	12	12%
25-30 years	42	42%
30-35 years	37	37%
35-40 years	9	9%
<b>Gender</b>		
Male	48	48%
Female	52	52%
<b>Education</b>		
Primary	06	6%
Secondary	21	21%
Higher secondary	27	27%
Graduate	38	38%
Post graduate	8	8%
<b>OCCUPATION OF PARENTS</b>		

After getting the formal permission from the concerned authority the researcher will conduct a pilot study on 10 parents of under five-year children.

**Reliability**

Reliability analysis done by Split Half Method. Tool is reliable. Pearson 's correlation coefficient formula  $r = 0.99$

**Validity**

In order to obtain content validity, the tool was given to total 06 experts from m health nursing.

**Specification of instruments and related measures**

A self structured questionnaires is used to assess the level of knowledge.

**Target Population**

The target population for the present study includes the target population Parents of under five-year children

**Accessible population**

The accessible population for the present study was includes the accessible population is teenagers in selected areas of community.

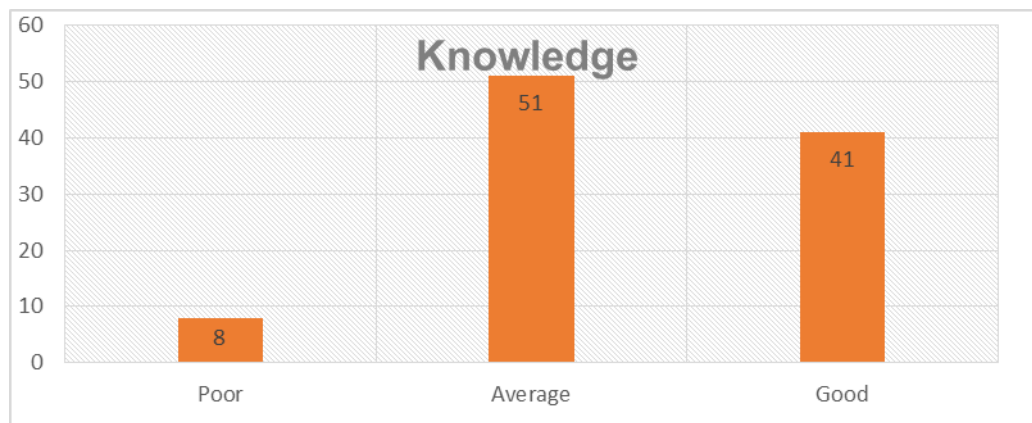
**Sample size: 100****Inclusion criteria**

1. The parents who are willing to participate in the study.
2. The parents who are available at the time of data collection.
3. The parents who have under five-year children.

**Exclusion criteria**

1. Parents who are non-co-operative and non- willing

Private employee	43	43%
Government employee	18	18%
Housewife	31	31%
Unemployed	8	8%
<b>RELIGION</b>		
Hindu	74	74%
Muslim	15	15%
Christian	4	4%
Other	7	7%
<b>Type of family</b>		
Nuclear	36	36%
Joint	46	46%
Extended	18	18%



**Graph 1: Clustered Graph Showing Knowledge of Parents of under five year children.**

In this study there is 8% parents having poor knowledge, 51% have average knowledge and 41% parents of under five year children having good knowledge regarding prevention of protein energy malnutrition in selected areas of community.

#### **Association of knowledge with selected demographic variables was assessed by using Chi-Square test.**

In this study p-values for some demographic variables are large (greater than 0.05) and for the one variable that is small (smaller than 0.05). Education variables p-value is 0.0122 that is smaller than (0.05) so education variable is associated with the level of knowledge of parents of under five-year children. Except Education Variable rather than other all demographic variables p-values are large (greater than 0.05) that was found to non-significant association with the knowledge.

#### **DISCUSSION**

In the present study 100 parents of under five-year children with descriptive study design. In This study There is 8% parents having poor knowledge 51% have Average knowledge and 41% parents of under five-year children having good knowledge regarding prevention of protein energy malnutrition in selected areas of community. The mean knowledge score was 33.33 and a standard deviation of 22.502 The mean value was 33.333 of the present study. The SD 22.502 and t value was 2.566 of the present study.

A similar study conducted by MS. Monika Chaudhary on Knowledge regarding prevention of protein energy malnutrition among under five mothers in selected hospital in Meerut with a view to develop health education module. Majority of 75% of subjects were having moderate knowledge regarding prevention protein energy malnutrition and only 8% of subjects were found with inadequate knowledge regarding prevention of protein energy malnutrition. The mean knowledge score was 16.4 and a standard deviation of 4.72, which means there is a need of enhancement of knowledge of mothers regarding prevention of protein energy malnutrition.

#### **CONCLUSION**

In India PEM is associated with web of factors including insufficient food intake, low socio economic status, poor dietary habits, faulty weaning practices, frequent infections, ignorance, family size etc. Gross malnutrition is said to kill around 5, 00,000 of our infants and children every year (WHO 2007). In the present study majority of 75% of subjects were having moderate knowledge regarding prevention protein energy malnutrition and only 8% of subjects were found with inadequate knowledge regarding prevention of protein energy malnutrition. The knowledge of the subject was influenced by source of information. So, the researcher conclude that there is need to enhance knowledge regarding prevention of protein energy malnutrition. The overall experience of study was satisfying one, as there

was good cooperation from parents. The study was a new experience for the researcher. The result of present study show that there is significant association between demographic variables and parents knowledge level regarding prevention of protein energy malnutrition under five year children.

### **Nursing Implication**

The result obtained from the study helped the researcher to drive certain implication for nursing practices, nursing administration, nursing education nursing research.

### **Nursing Administration**

Study gives emphasis on organization of continuing nursing education for the nurses in health care setting who will teach parents regarding prevention of protein energy malnutrition.

### **Nursing Services**

Community health nurses are the link between the community and the health care system. She is a direct care provider, a change agent in the community and is also a health team member works in close association with subjects and plays an important role in implication of prevention of protein energy malnutrition.

### **Nursing Education**

The findings of the study proved that knowledge and practices of the students must be improve. The nurse educator needs to assess the existing level of knowledge and practices and their impact insights into students that are important to the group.

### **Nursing Research**

Based on the finding, the professional and student nurses can conduct further studies on knowledge, attitude and practices toward the prevention of protein energy malnutrition.

### **LIMITATION**

1. The study was limited to parents who have under five year children.
2. The data was collected only form those who were present during study.
3. The data collection period was limited.

### **RECOMMENDATION**

On the basis of finding of the study, the following recommendations are made for further research.

1. Similar study may be conducted in the large scale for making a more valid generalization.
2. A comparative study may be conducted between urban and rural subject.
3. Similar study may be conducted from community nurse in the community.
4. A similar study can be conducted to see the effectiveness of the information booklet.
5. The social periodic training programs for parents on prevention of protein energy malnutrition which will

help the students to improve their knowledge, practices from good to better.

### **Ethical approval**

Ethical approval was obtained from ethical institutional committee of VMPCON, Akluj.

### **Conflict of interest**

The author certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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