THE KNOWLEDGE REGARDING PROTEIN ENERGY MALNUTRITION AMONG URBAN AND RURAL MOTHERS WITH UNDER FIVE CHILDREN

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ABSTRACT

Malnutrition is one of the leading causes of morbidity and mortality in children aged five years and below malnutrition is a contributing cause in more than half of the children's deaths. Almost half of the deaths worldwide are due to being under weight. Risk factors for severe protein energy malnutrition (PEM) have been identified as ignorance, family size, parents education, poverty, sex of the child and incomplete immunization of the child. The lack of food is not the sole cause of malnutrition. Lack of awareness and knowledge about feeding amount, frequency, type of food etc. contributes significantly to poor nutritional status among children. This study was under taken to assess the knowledge of mothers of under five children regarding prevention of protein-energy malnutrition between urban and rural Area.

Key Words: Immunization, Protein-energy Malnutrition, Nutritional

Introduction

Nutritional status of children reflects a healthy and a productive generation in future for children especially if the nutritional condition is a critical inadequate or excessive. Improved nutrition and health enhance the learning ability of children. In the long run, it leads to an increase in the strength of labour and thereby it contributes positively for economic growth. Thus good nutrition is essential for healthy, thriving individuals, families and a nation. The human body requires a certain amount of macronutrients such as energy, protein, fats and micro nutrients to maintain good health

Today nutritional disorders constitute a major public health problem in India and other countries of the third world. In India, gross malnutrition is said to kill around 5,00,000 of our infants and children every year, this is quite understandable in view of the fact, that aroundthree fourth of our paediatric population suffers from one or another nutritional deficiency

Malnutrition is the wide spread condition affecting the health of children. Scarcity of suitable foods, lack of purchasing power of the family as well as traditional beliefs and taboos about what the baby should eat, often lead to an insufficient balanced diet resulting in malnutrition.

World wide, the most common cause of malnutrition is inadequate food intake. Preschool aged children in developing countries are often at risk for malnutrition because of their dependence on other for food, increased protein and energy requirements, immature immune systems causing a greater susceptibility to infection, and exposure to non hygienic conditions.

Another significant factor is ineffective weaning secondary to ignorance, poor hygiene, economic factors and cultural factors. Gastro intestinal infections can often do precipitate clinical protein energy malnutrition because of associated diarrhoea, anorexia, vomiting, increased metabolic needs and decreased intestinal absorption. Parasitic infections play a major role in many parts of the world

National level preventive measures consist of measures to improve food production, control price-rise, make available cheap supplementary foods, fortify and enrich foods, prevent adulteration. World level preventive measures include efforts to intensify various international food program like those of WHO, FAO, UNICEF, CARE etc.

The Lack of food is not the sole cause of malnutrition. Lack of awareness and knowledge about feeding amount, frequency, type of food etc. contributes significantly to poor nutritional status among children

Lack of awareness about feeding and certain foods, cultural taboos are main cause for malnutrition. Hence nutrition education is of great importance in plans for the control of malnutrition people should be informed of the nutritional quality of various locally available and culturally accepted low cost foods.

Need for the study

The question is not treating the individual cases suffering from overt picture of nutritional deficiencies, much more than that prevention of malnutrition. Preventing levels are family, community, national and world. In this view in family i.e., mother is the primary care giver,

her knowledge is most significant in the preventive measures, for preventing malnutrition the supplementary feeding programmers in India includes applied nutrition programmer, mid day meal programmer for school children, special nutritional programme etc.

The Efforts should be made to prevent these children stepping down to severe malnutrition by nutrition education, health check up, early intervention and control of infection. Nutrition education should be specially directed to those members of the family or mothers, who make decisions, who can influence other persons in the family.

Teaching regarding prevention of protein energy malnutrition to the mothers of under five children will help their children to lead a health productive life as long as they live healthy and wealthy to the family and nation. In order to meet the learning needs of mothers of under five children, structured teaching programme has to be developed for the promotion of their children health and prevention of protein energy malnutrition among under five children.

Objectives

1. To assess the knowledge level of urban mother regarding proteinenergy malnutrition
2. To assess the knowledge level of rural mother regarding protein energymalnutrition
3. To compare the knowledge score of urban and rural mothers.
4. To associate the knowledge level of urban and rural mother regarding protein energy malnutrition with selected demographic variables

Hypothesis

H_1 The knowledge of urban mother may he higher than knowledge of rural mother regarding PEM.

H_2 Find the association of the level of knowledge of protein energy malnutrition with their selected demographic variables

Assumptions

The study was based on the following assumptions:

I.   Mothers of under five children will have some knowledge on protein energymalnutrition.
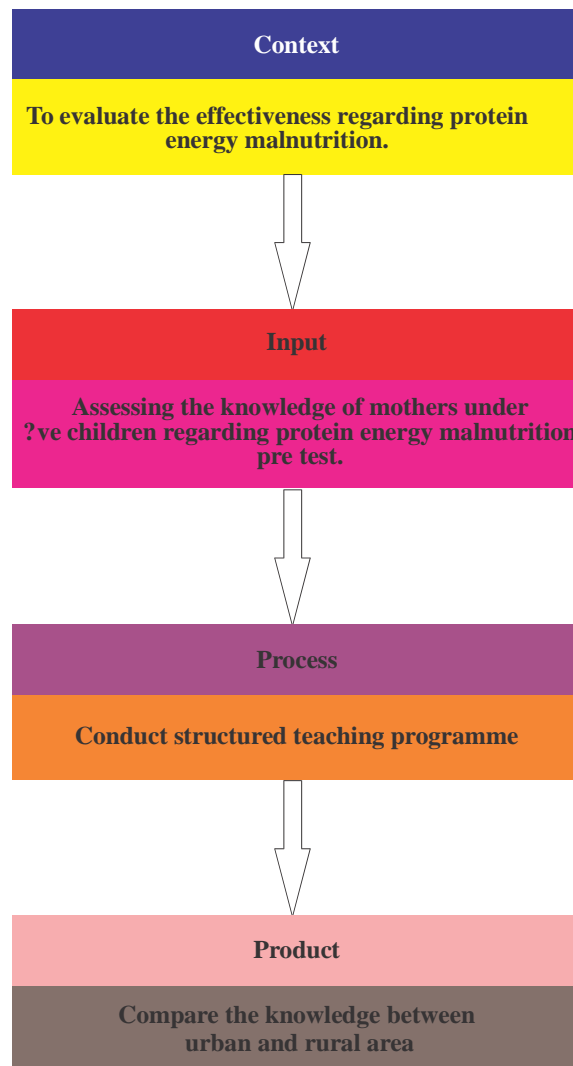II.   Mothers who participate in the study may be cooperate in the study."_

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Context

To evaluate the effectiveness regarding protein energy malnutrition.

Input

Assessing the knowledge of mothers under ?ve children regarding protein energy malnutrition pre test.

Process

Conduct structured teaching programme

Product

Compare the knowledge between urban and rural area

Figure 1: Conceptual Framework Based on Modi?ed Evaluation Model by Stuf?e Beam (1983)

RESEARCH METHODOLOGY

Research methodology involves the systematic procedure by the researcherwhich starts from initial identification of the problem to its final conclusion.

Analysis is a "process of organizing and synthesizing data in such a way that research questions can be answered and hypothesis tested."
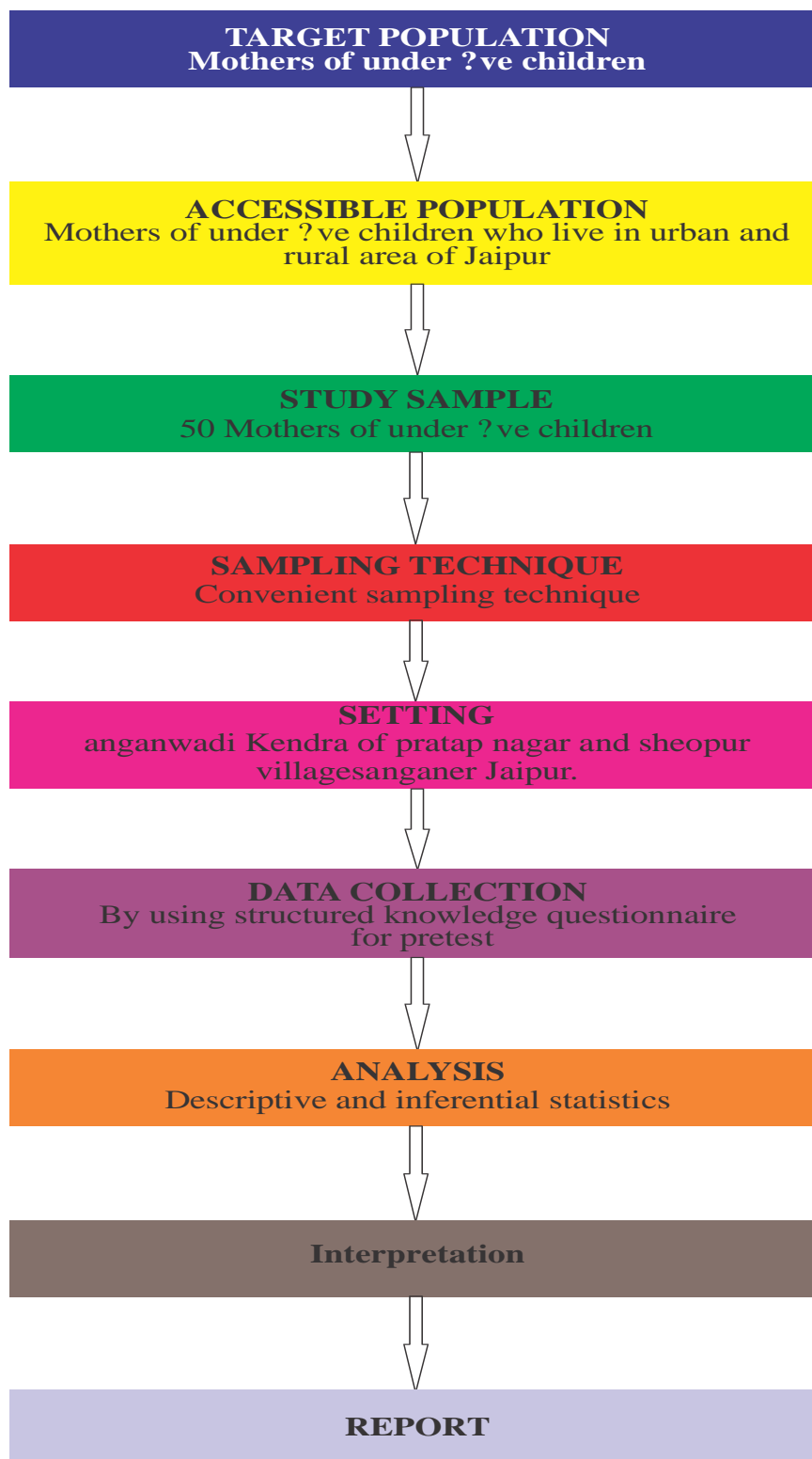
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TARGET POPULATION
Mothers of under ?ve children

ACCESSIBLE POPULATION
Mothers of under ?ve children who live in urban and
rural area of Jaipur

STUDY SAMPLE
50 Mothers of under ?ve children

SAMPLING TECHNIQUE
Convenient sampling technique

SETTING
anganwadi Kendra of pratap nagar and sheopur
villagesanganer Jaipur.

DATA COLLECTION
By using structured knowledge questionnaire
for pretest

ANALYSIS
Descriptive and inferential statistics

Interpretation

REPORT

Figure 2: Schematic Representation of the Research Design

Results

Analysis is a "process of organizing and synthesizing data in such a way that research questions can be answered and hypothesis tested"

SECTION:1: ANALYSIS OF DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Demographic data of the respondent is described in terms of age, education, occupation, type of family, income, food habits, source of health information, number of under five children, immunization status of children, child particulars and history of protein energy malnutrition.

Table 1: Classification of Respondents by Age, Education and Occupation

n=50

Characteristics	Category	Respondents	
		Number	Percent
Age group (years)	20-22	17	34%
	23-27	21	42%
	28-32	12	24%
Religion	Hindu	25	50
	Muslim	15	30
	Christian	6	12
	Other	4	8
Educational status	Illiterate	10	20.0
	Primary	3	6.0
	Secondary	14	28.0
	High school	17	34.0
	PUC	6	12.0
Occupation	Housewife	41	82.0
	Daily wages /coolie	6	12.0
	Private employee	3	6.0
Type of family	Nuclear	26	52.0
	Joint	24	48.0
Family income / month	Below Rs 2000	20	40.0
	Rs 2001-4000	19	38.0
	Above Rs 4000	11	22.0
Food. habits	Vegetarian	4	8.0
	Non-vegetarian	46	92.0
Source of health information @	Newspaper / Magazines	20	40
	Radio	5	10
	Television	5	10
	Relatives / Family members	10	20
	Friends / Neighbours	5	10
	Health personnel	5	10

Table 2: Aspect wise Pre Test Mean Knowledge of Mothers of Under Five Children Regarding Prevention of PEM

n=50

No.	Aspects	Statements	Max. Score	Range Score	Respondents Knowledge		
					Mean	Mean (%)	SD (%)
I	Meaning, importance and sources of nutrients	6	6	0-4	1.34	22.3	22.2
II	Malnutrition, causes, signs and symptoms of	12	12	0-8	3.50	29.2	18.9
III	Management, complications and	12	12	1-10	4.26	35.5	18.4
IV	Assess knowledge on practice regarding	18	18	6-13	7.76	43.1	11.2
	Combined	48	48	7-29	16.86	35.1	11.8

Table 5, shows that aspect wise pretest mean knowledge of respondents indicates that highest mean knowledge 43.1% was found in the aspect of knowledge on practice regarding protein energy malnutrition, 35.5% mean knowledge in the aspects of management, complication and prevention of protein energy malnutrition, 29.2% on malnutrition, causes, signs and symptoms of protein energy malnutrition and lowest mean knowledge (22.3%) noticed in the aspect of meaning, importance and sources of nutrition. However, the overall pretest mean knowledge score is 35.1% with SD as 11.8%.

Table 3: Classification of Knowledge Level of Mothers of Under Five Children Regarding Prevention of PEM

n=50

Knowledge Level	Classification of Respondents			
	Rural mothers		Urban mothetrs	
	Number	Percent	Number	Percent
Inadequate (< 50%)	40	80.0	0	0.0
Moderate (51-75%)	10	20.0	31	62.0
Adequate (> 75 %)	0	0.0	19	38.0
Total	50	100.0	50	100.0
X^2 Value	95.29*			

* Significant at 5% level, X^2 (0.05, 2df) = 5.991

Table 9 show the knowledge level of mothers of under five children regarding prevention of protein energy malnutrition. The result indicate that 80% of respondents had inadequate knowledge in rural area mothers, 20% of respondents had with moderate knowledge rural area mothers. Urban area mothers 62% of respondents acquired moderate knowledge level and 38% of respondents had adequate knowledge on protein energy malnutrition. However, the difference in the knowledge level of respondents between rural and urban was statistically significant
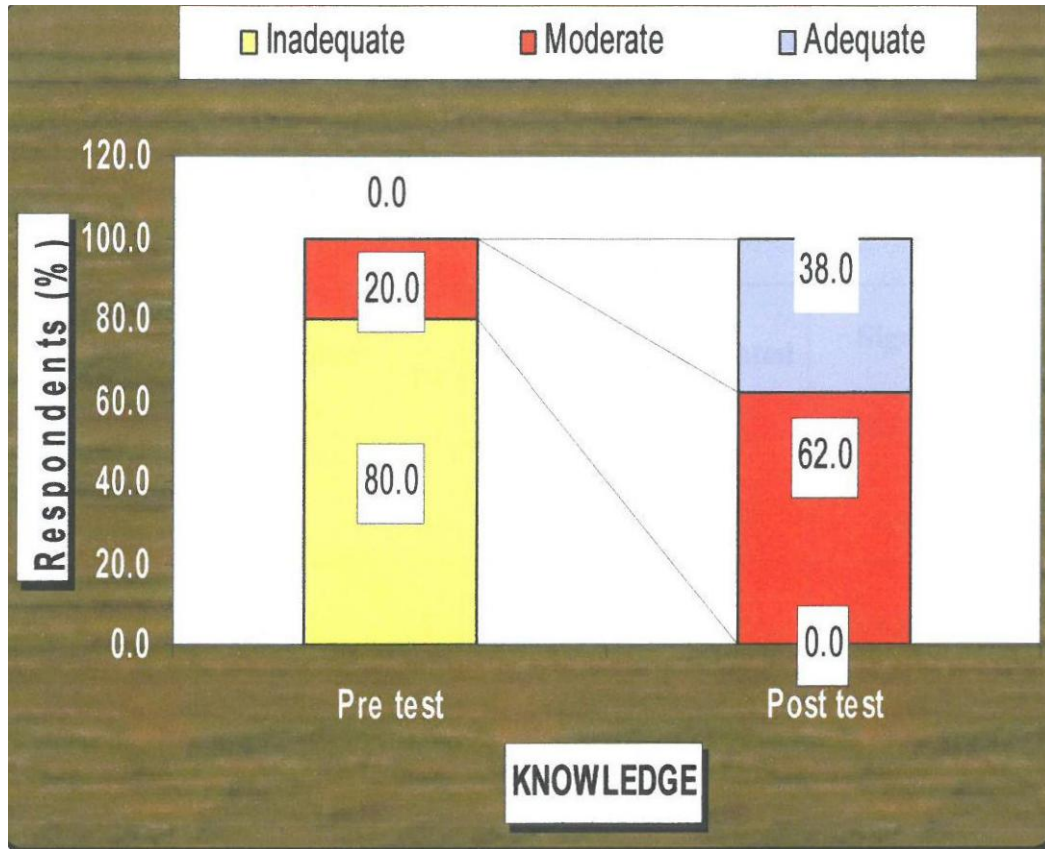
**Figure 3: Pre Test and Post Test Knowledge Level of Mothers
on Prevention of PEM**

The findings showed that the mean knowledge score of urban mothers was 72.2 percent was higher than the mean pretest score of rural mothers was 35.1 per cent and was found to be significant with a calculated 't' value of 26.23*, $P < 0.05$. Association between mean knowledge score and selected variables depicted that there is no association with mean knowledge scores and variables like religion, education, number of under five children.

PART III: Association between knowledge levels of mothers with demographic variable

Table No. 04: Association between knowledge levels of students with demographic variable

S. No.	Demographic Variable	Df	Tabulated Value	Calculated Value	Significant / Not Significant
1.	Age	4	9.49	10.86	Significant
2.	Religion	6	12.99	2.51	Not Significant
3.	Education	6	12.99	13.94	Significant
4.	occupation	2	5.99	8.74	Significant
5.	Types of family	2	5.99	6.62	Significant
6.	Family Income	4	9.49	6.44	Not Significant
7.	Food habit	2	5.99	4.88	Not Significant
8.	Sources of income	6	12.99	6,87	Not Significant

CONCLUSION

Malnutrition is one of the leading causes of morbidity and mortality in children aged five years and below. Risk factors for severe protein energy malnutrition (PEM) have been identified as ignorance, family size, parents education, poverty, sex of the child and incomplete immunization of the child. Lack of food is not the sole cause of malnutrition. Lack of awareness and knowledge about feeding amount, frequency, type of food etc. contributes significantly to poor nutritional status among children. With this view theinvestigator has selected this topic for her study to enhance the knowledge of mothers of under five children on protein energy malnutrition

The overall finding of the study clearly showed that the knowledge of urban mothers was higher than knowledge of rural mothers and a structured teaching programme regarding PEM may be useful for mothers who have insufficient or moderate knowledge regarding PEM. The results also show that various demographic variables have significant association with pretest level and some are non-significant.

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