



# A PRE- EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PROTEIN ENERGY MALNUTRITION(PEM) AMONG MOTHERS OF UNDER FIVE CHILDREN IN SELECTED RURAL AREAS, AT BIKANER, RAJASTHAN.”

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**Abstract:-**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 pre-school 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. The objectives of the study is to assess Pre-Test level of awareness of Protein Energy Malnutrition in mothers of under-five children as calculated by a standardized interview plan. To assess the Effectiveness of the Planned Teaching Programme on Protein-Energy Malnutrition awareness among mothers of children under the age of five in terms of benefit in mean Post-Test knowledge ranking. To find out the association between the Pre-Test knowledge score of Mothers with Selected Demographic Variables. Methodology:- Pre experimental one group pre test and post test design was used in this study the study was conducted rural areas of Bikaner Rajasthan. Total 60 Sample were chosen by convenient sample technique. A planned knowledge questionnaire used to evaluate the knowledge regarding among mother under five years children. Data was analysed by descriptive and inferential statistics. Result the over all pre test and post test means are 10.46 and 24.15 with SD of 4.12 & 3.81 respectively and t value 27.093 which was highly significant at P<0.05 level. Conclusion the study was conducted that there was a significant a knowledge after the intervention the planned teaching programme.

**Key words:-** Knowledge, Effectiveness, Planned Teaching Programme, PEM.

**Introduction :-** Food is an input to health and progress, and a cornerstone. Better diet ensures a healthier immune system, less infections and better fitness. Kids that are safe learn faster. Safe people are healthier, more prosperous and more capable of generating jobs in a sustainable way to eventually break the patterns of famine and hardship. Better nutrition is a crucial step in ending hunger and a landmark in achieving a greater quality of life.<sup>1</sup>

In Indian culture, the notion of a close relationship between diet and disease has persisted since ancient times. Nutritional shortages in India and other Third World countries today constitute a significant public health issue. Food of children under five is of almost significant and during this era the foundation so far life span, fitness, power and stamina of intellect are laid, India faces the challenges of diseases in which dietary shortages are more frequent since we have reached the new millennium. PEM has been described as a significant health and diet issue among the nutritional problems in India. Protein energy deficiency is the deadliest type of malnutrition by far. Its most visible casualties are youngsters. It is not only a significant cause of childhood illness rate and death rate, it also causes to the physical and mental development of the life time deterioration of survivors.<sup>2</sup>

PEM has been identified as a major public health and nutrition problem in India. It can be defined as a group of clinical conditions that may result from varying degree of protein deficiency and energy (calorie) inadequacy. Previously, it was known as protein-calorie malnutrition (PCM).<sup>3</sup>

In both children and adults, PEM is totally widespread in world and due to PEM there are 6 million deaths of under five children worldwide. In the developed world, PEM is primarily used in hospitals, is associated with sickness, or is frequently seen in elderly persons.<sup>4</sup>

S. Chakraborty, S.B. Gupta, carried out a study A Study of Protein Energy Malnutrition (PEM) in Children (0 to 6 Year) in a Rural Population of Jhansi District (U.P.) The overall occurrence of PEM in under 6 year children was observed to be 67%, however it was found to be significantly higher (80.9%) in the age group of 1-3 years as compared to other age groups. This age group also exhibited significantly higher prevalence ( $\chi^2=14.67$ ,  $p<0.05$ ) of Grade I, II, III PEM. Sen et al. also reported a higher prevalence in the age group of 1-3 years, however Saxena et al. (2019) reported a higher prevalence in the age group of 0-1 year. It was found that female had an overall higher prevalence of PEM (70.6%) as also Grade I PEM (36.6%) in comparison to males who had overall higher prevalence of PEM and Grade PEM as 62.6 and 19.7% respectively.<sup>5</sup>

#### **Objectives:-**

- To assess Pre-Test level of awareness of Protein Energy Malnutrition in mothers of under-five children as calculated by a standardized interview plan.
- To assess the Effectiveness of the Planned Teaching Programme on Protein-Energy Malnutrition awareness among mothers of children under the age of five in terms of benefit in mean Post-Test knowledge ranking.
- To find out the association between the Pre-Test knowledge score of Mothers with Selected Demographic Variables

**Methodology:-**

**Research approach:-**In present study quantitative evaluative research approach was adopted.

**Research design :-** In present study Pre experient design was used for this study.

**Setting:-** the study was carried out among mother under five year children selected rural areas which comes Vallabh garden,sudarshnanagar Bikaner.

**Population :-** In present study population consist of mothers under five years children who are living selected rural areas of Bikaner.

**Sample Size:-**In present study total 60 mothers under five years children was selected for this study.

**Sampling techniques:-** Non probability convenient sampling was adopted in present study.

**Development of Planned teaching Programme:-** PTP regarding PEM among mothers of under five children was developed.

**Data collection technique:-**Driscption of the tools for data collection consist of two section

**Section A Socio demographic****Section B Structured Knowledge Questionnaire regarding PEM**

**Data collection Procedure**→ the main study was conducted for some selected areas of Bikaner, informant consent was taken from mother under five years children, total of 60 sample were selected by using non probability convenient sampling technique .After selection of sample. Pre test level of knowledge was assessed with structured knowledge regarding PEM followed by PTP on PEM was implemented after seven days Post test was conducted by using structured knowledge questionnaire.

**Score Interpretation**

Minimumscore=0,

Maximumscore=30

Level of Awareness	Score	Percentage	Coding
Excellent	24-30	>75	1
Good	15-23	50-75	2
Average	0-14	<50	3

This section deals with frequency and percentage distribution of samples according to demographic variables

**Table1:Socio-Demographic profile of Mothers.(N=60)**

Section1:Description of Demographic Variables						
Table1:Frequency and Percentage Distribution of the						characteristics
						N=60
S.NO	Variable			Frequency	Percentage	
1	<b>Age of the mother</b>					
	a.	<25 yrs		9	15	
	B	25-30 yrs		24	40	
	C	31-35 yrs		20	33.33	
	D	>35 yrs		7	11.667	
2	<b>Educational status of mother</b>					
	A	Illiterate		8	13.334	
	B	Primary		16	26.667	
	C	Secondary		22	36.667	
	D	Highersec.andabove		14	23.3334	
3	<b>Family income per month(Rs)</b>					
	A	<5000		0	0	
	B	5001-10000		19	31.667	
	C	10001-15000		27	45	
	D	>15000		14	23.334	
4	<b>Number of children</b>					
	A	One		14	23.333	
	B	Two		30	50	
	C	Three		14	23.333	
	D	More than three		2	3.334	
5	<b>Religion</b>					
	A	Hindu		48	80	
	B	Muslim		12	20	
	C	Sikh		0	0	
	D	Any other		0	0	
6	<b>Types of family</b>					
	A	Nuclear		34	56.667	
	B	Joint		22	36.667	
	C	Extended		4	6.667	
	D	Single parent		0	0	
7	<b>Occupation of mother</b>					
	A	House wife		46	76.667	
	B	Private job		9	15	
	C	Govt.job		3	5	
	D	Self-employed		2	3.334	
8	<b>Duration of breast feeding</b>					
	A	<6 month		7	11.667	
	B	6 month-1 yr		45	75	
	C	>1yr		8	13.334	

This section deal with Analysis and Interpretation of data in order to evaluate Effectiveness of Planned Teaching Programme on Knowledge Regarding PEM.

Table2: The Pre-existing level of knowledge Regarding PEM among Mothers.

(N=60)

Sr.No.	Level of knowledge	F	%	MeanSD
1.	Excellent	00	00%	4.1275
2.	Good	17	28.33%	
3.	Average	43	71.66%	

Table3: The Post-existing level of knowledge Regarding PEM Among Mothers.

(N=60)

Sr.No.	Level of knowledge	F	%	MeanSD
1.	Excellent	29	48.33%	3.81
2.	Good	30	50%	
3.	Average	1	1.66%	

This Section deal with Analysis and Interpretation of data in order to Evaluate Effectiveness of Planned Teaching Programme on PEM.

Table 4: Compare the Pre-test and Post-test knowledge regarding PEM among mothers of under 5.

(N=60)

Comparison	Mean	SD	Difference	t-value	Df	p-value
Pre-test	10.46	4.12	13.69	27.093	59	0.0005
Post-test	24.15	3.81				

NB-\*\*highly significant ( $p < 0.001$ )

**Analysis and interpretation of data in order to find the Association of Pre-test score of Mothers with Selected Demographic Variable.**

**Table5: Association between Pre-test knowledge Score with Selected Socio Demographic Variables.**

N=60

S.No.	Demographic Variables	Knowledgelevel			Chi <sup>2</sup> value	Df
		Excellent	Good	Average		
1.	Age(inYrs.)				13.49(S)	06
	<25	00	03	03		
	25-30	00	17	17		
	31-35	00	03	17		
	>35	00	04	03		
2.	Education OfMother				15.69(S)	06
	Illiterate	00	02	06		
	Primary	00	07	09		
	Secondary	00	05	07		
	HigherSr.	00	03	11		
3.	FamilyIncome(InRs.)				14.22(S)	06
	<5000	00	00	00		
	5001-10000	00	11	08		
	10001-15000	00	03	24		
	>15000	00	03	11		
4.	No.of children				16.21(S)	06
	1	00	06	08		
	2	00	09	21		
	3	00	02	12		
	>3	00	00	02		
5.	Religion				18.03(S)	06
	Hindu	00	13	35		
	Muslim	00	04	08		
	Sikh	00	00	00		
	Other	00	00	00		
6.	Typeof family				16.51(S)	06
	Nuclear	00	03	31		
	Joint	00	13	09		
	Extended	00	01	03		
	Singleparent	00	00	00		
7.	OccupationofMother				13.53(S)	06
	Housewife	00	11	35		
	Private	00	05	04		
	Govt.	00	01	02		
	Selfemployee	00	00	02		
8.	DurationofBreast feeding				15.21(S)	04
	<6months	00	03	04		
	06-01year	00	11	34		
	>01 year	00	03	05		

Note: df=Degree of freedom, S=Significant

## CONCLUSION

The study finding shows that there is significant improvement in knowledge e after PTP on PEM. The nurses expressed that the teaching programme was very informative, clear and it would help them to modify their knowledge which will appropriate to maintain optimum health condition. Hencethe PTP was instructionally effective, appropriate, and feasible and has enhanced the level of knowledge regarding PEM. So, the study concluded that objective was achieved, hypothesis was tested at the level of  $P > 0.05$  and assumption was accepted. The PTP on PEM which was implemented to them others was effective.

## DISCUSSION

In present study deals with discussion part according to the results, obtained from statistical analysis based on the data of the study, there view literature, hypothesis which was selected for the study. The present study was conducted to evaluate the effectiveness of Planned Teaching Programme on knowledge regarding PEM. In order to achieve the objectives of the study,a pre-experimental one group Pre-test,Post- test design was adopted Convenient Sampling technique was used to select the sample. The data was collected from 60 mothers before and after providing Power Point presentation by planned questionnaire schedule. The findings of the study have been discussed with reference to the objectives ,hypothesis, and with the findings of other studies.

### Nursing implication of the study

The finding of the study has implication for nursing education, community health practice, nursing practice and nursing research.

### Nursing Education

The nursing curriculum should consist of increased depth, content andactivities which help to develop knowledge skill among mothers on PEM. Asanurse educator, there are abundantopportunities for nursing professionals toeducate people regarding PEM. The study emphasizes significance of to conduct short term in-service education programme for nurses and peripheral health workers related to health education of mothers regarding PEM. Nursing personnel working should be given in-service education and help them to abreast with recent trends. The nurse educator needs to conduct health campaigns and use different informational modalities, teaching strategies aboutPEM. The nurse should educate about the utilization of local health services andvoluntary health agencies availability which helps to promote better health and prevent complications.

## **Nursing Practice**

An implication of nursing practice derived from the study is that, in modern times, health care delivery system has changed from a care-oriented approach to promotion of health and prevention of illness oriented approach. Nurses are the key persons of the health team who play a major role in effective health promotion and maintenance. This study implies a basis for developing standards of lifestyle, health care at home as well as in the care of community. Providing health education is one of the functions of nursing personnel, its accountability should be stressed. Nursing interventional programs can be used as a teaching strategy in the community. Health education can be imparted through mass media, i.e. through radio, television, documentary films, pamphlets, leaflets, information booklet and lesson plans. This will help the nursing profession to move towards the goal of providing holistic care.

## **Nursing Administration**

The nurse administrator can take part in developing protocols, standing orders related to design of the health education programme to update nursing personnel's knowledge regarding PEM among Mothers. The nurse administrator can mobilize the available resource personnel towards the health education of the mothers regarding PEM. They should take interest in providing information on selected aspects. They should be able to plan and organize programs, taking in to consideration of cost effectiveness and carry out successful educational programs. The nurse administrator should plan and organize continuing education programme for the nursing staff to organize the camps regarding PEM among mothers. The nurse administrator should explore their potentials and encourage innovative ideas in the preparation of appropriate information and modalities. She should organize sufficient man power, money, and material for disseminating health information.

## **Nursing Research**

The study helps the nurse researchers to develop appropriate health education tools for educating mothers regarding PEM. Nurses should come forward to take up unsolved aspects in the field of care to public. The study will motivate the beginning researchers to conduct some study with different variables on a large scale. The public and private agencies should also encourage research in this field through needed materials and funds.



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