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Research Paper

Impact of structured teaching programme (STP) on knowledge regarding prevention of protein energy malnutrition (PEM) among the mothers of under-five children at a selected community area, Bhubaneswar,Odisha, India

Nursing

KEYWORDS : Impact ,STP ,Prevention, PEM

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ABSTRACT

A Quasi experimental design was conducted among the mothers of under-five children to assess the effectiveness of structured teaching programme (STP) on knowledge regarding prevention of protein energy malnutrition. An evaluative approach with one group pre test and post test design was used for the study.60 samples were selected by purposive sampling technique method through the closed ended multiple choice questionnaire. The present study was conducted in Sitanatha basti area,Niladrivihar Bhubaneswar,Odisha.The data were analyzed by descriptive and inferential statistics A significant difference between pre test & post test knowledge was found (t=59,p≤0.05). The study findings showed that the STP was effective in improving the knowledge of mothers of under-five children regarding prevention of PEM. There was no significant association between the level of knowledge & demographic variables

INTRODUCTION

"Health is wealth"

World's greatest resource for a healthy future lies in the children of today. Today children are tomorrow's citizen and leaders. The resources spent on the care, upkeep and health of the young ones form investment of for the future.

It is often stated that children are the world's most valuable resources and assets, but their rights throughout the world are largely ignored often resulting into tragic outcomes. This is because of the vulnerability of the children from infancy through childhood, as they are dependent on adult for safety and ongoing nurturing and this puts them at risks in many form[1].

A country needs a well nourished population of the children, in order to have a healthy and productive labor force in future. Nutritional status of the child today reflects a healthy and productive generation in future. Nutritional condition is a critical factor for optimum growth and it should neither be inadequate nor excessive. Improved nutrition and health enhance the learning ability of the children. In the long run it needs to an increase in strengthen of the labor and contributes positively for economic growth. Thus good nutritious food is essential for healthy living thriving individuals, families and nation[2].

Protein Energy Malnutrition (PEM) is not due to deficiency in a single nutrient, but is often a result of inadequate intake or poor utilization of the food. In addition frequent infections contribute to malnutrition. For a long period the focus was on lack of protein in the diet. However it is generally accepted that lack of energy in food is a more important and common factor development of PEM [3].

Protein-Energy Malnutritionis a global problem. Nearly 150 million childrenunder 5 years in the world and 70-80 million in India suffer from protein-energy malnutrition, nearly 20 million in the world and 4 million suffer from severe forms of Protein-Energy Malnutrition like Kwashiorkor and Marasmus.[4]

In the light of the above facts and from the experience of the investigator, it is observed that there is need to determine the knowledge regarding prevention of Protein Energy Malnutrition of under five children. Every citizen should be aware of the nutritional requirements for themselves and their children. Adequate food is the most important requisite for growth and development, which is important throughout childhood and later life. In order to bring up a healthy nation, all of us should realize that our children's health is our health and our health is the nation's health, thereby improving the children's' quality of life.

Objectives

- To assess the effectiveness of Structured teaching program on knowledge of mothers regarding the prevention of PEM in under five children.
- To find out the associate between post test knowledge score of mothers with selected demo graphic variables.
- To compare between post test knowledge score of mothers with selected demographic variables.

Hypothesis

H_1 → There will be a significant difference between pretest & posttest knowledge scores regarding prevention of PEM among the mother.

H_2 →There will be a significant association between post test knowledge scores with their selected demographic variables.

Materials & methods:-

A quantitative approach with Quasi-experimental research design was used for the study. The study was conducted at sitanatha basti area,Niladri vihar, Bhubaneswar, Odisha, Where 60 mothers of under-five children were selected by Purposive sampling technique. The data were collected by using structured questionnaire method. The tool consists of 2 section. Sect-1 consisting of (Socio-demographic variables such as age, Educational qualification,religion,occupation,type of family,area of living,number of children in the family and income per month & section II (consisting of 35 items related to knowledge regarding prevention of protein energy mal nutrition). The content validity of the tool and module was done from various experts. Pilot study was conducted at Chakeisihani, Bhubaneswar, Odisha, which is other than the main setting. The reliability of tool was computed by applying split half technique & was calculated by Karl Pearson's coefficient of correlation formula, which was found reliable (r=0.82).

FINDINGS

Table:1: Frequency & percentage distribution of mothers of underfive children according to their demographic variable

Age in years	Frequency(h)	Percentage%
< 20	21	35
21 – 25	25	41.7
26 – 30	13	21.7

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> 35	1	1.7
Education Status		
Illiterates	20	33.3
Secondary	18	30
Primary	12	20
Graduation	10	16.7
Religion		
Hindu	46	76.7
Muslim	8	13.3
Christian	5	8.3
Sikh	1	1.7
Occupation		
Govt. sector.	5	8.3
Private sector	10	16.6
Unemployed/ house wife	25	33.3
Daily wages	20	41.6
Type of family		
Nuclear	40	66.7
Joint	15	25
Extended	5	8.3
Resident Resident		
Urban slum area	45	75
Rural area	15	25
Occupation		
<5000	10	16.7
5001-7000	33	55
7001-9000	15	25
>9001	2	3.3

Figure-1: comparing the level of knowledge regarding prevention of protein energy malnutrition among the mothers of under-five children.

LEVEL OF KNOWLEDGE

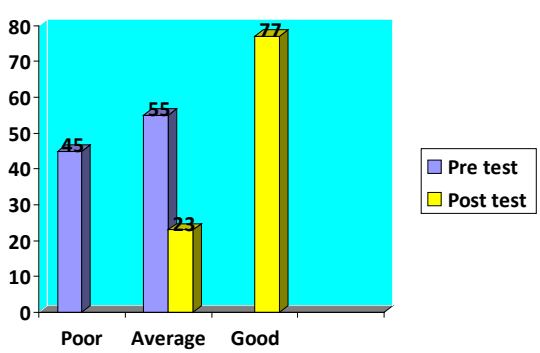


Fig-1: Bar diagram represents of level of knowledge regarding prevention of PEM.

Fig-1: Depicts that in the pretest 45% of the mothers had poor knowledge, 55% of the mothers had average knowledge and no mothers had Good knowledge. Where as in post test 77% of them had good knowledge and only 23% of them had average knowledge, revealing the effectiveness of STP.

Table-2: Overall and Area wise comparison of mean SD & mean% of pre & post test knowledge score of mothers regarding PEM

Sl. No.	Area	Max. score	Pretest			Post-test			Effectiveness
			Mean	SD	Mean %	Mean	SD	Mean %	
1	Definition, causes and types of PEM	6	.61	.85	10.27	4.95	.64	82.5	72.23
2	Sign symptoms of PEM	4	.6	.012	15	3.66	.47	91.66	76.66
3	Dietary factor of PEM	4	1.03	1.07	25.04	3.33	.50	83.33	57.73
4	Benefits of breast feeding	4	2.01	.55	50.04	3.6	.52	90	39.6
5	Benefits of weaning food	4	1.75	.84	43.75	3.36	.54	84.16	40.41
6	Techniques of food preparation	8	3.03	1.30	37.91	7.133	.79	89.16	51.25
7	Prevention of PEM	5	1.28	.93	25	4.5	.64	90	65
OVERALL		35	10.33	1.12	29.52	30.61	2.2	87.47	58

Table:2- Depicts that overall pretest knowledge score was (10.33±2.12) which is 29.52% where as post test knowledge score was (30.61±2.2) which is 87%, which shows the effectiveness of STP on knowledge regarding prevention of PEM among the mothers of under five children.

H_1- There will be significant difference in the pretest and posttest level of knowledge score among the mothers of underfive children of structured teaching programme.

Table 3: Comparison of pre test & post test knowledge score of mother regarding PEM.

AREA	't' value	LEVEL OF SIGNIFICANCE
Definition, causes and types of PEM	28.0318	Highly Significant
Sign symptoms of PEM	50.404	Highly Significant
Dietary factor of PEM	15.828	Highly Significant
Benefits of breast feeding	16.324	Highly Significant
Benefits of weaning food	12.435	Highly Significant
Techniques of food preparation	20.765	Highly Significant
Prevention of PEM	22.039	Highly Significant

(df=59), (Table Value=2.00), (P< 0.05)

Paired 't' test was calculated to assess the significant difference between pre and post test knowledge scores which shows highly significant difference between area wise score values of pre test and post test knowledge scores. Hence, the null hypothesis is rejected (P< 0.05) and the statistical hypothesis is accepted.

H_2: There will be a significant association between post test knowledge scores with their selected demographic variables.

Table-4 : Association between post test knowledge scores of mothers with their demographic Variables.

DEMOGRAPHIC VARIABLES	Chi-Square value	LEVELOF SIGNIFICANCE
Age	0.350	Not significant
Education	0.058	Not significant
Religion	0.024	Not significant
Occupation	0.322	Not significant
Type of family	0.200	Not significant
Area of living	2.556	Not significant
Number of children	0.100	Not significant
Monthly income	0.230	Not significant

(df=1), (Table value=3.84)

Chi square was calculated to find out the association between post test knowledge scores of the mother with their demographic variables. It was found that there was no significant association between knowledge scores among the mothers of under-five children on prevention of PEM, in post test when compared to age, education, religion, occupation, type of family, area of living family monthly income.

NURSING IMPLICATION

- The content of the structured teaching programme will help the mothers of under-five children to improve their knowledge regarding prevention of protein energy mal nutrition.
- The findings will help the community health nurse to be aware of situation and to conduct nutritional projects and participate in national nutritional programme and reduce the morbidity and mortality which is related to PEM of a children.
- With the over growing challenges of nursing the nurse administrator's have responsility to update knowledge with current situation and aware to the community people and use the study findings to improve the quality of care.
- Administrator can organize in-service education program, refresher courses & workshops for health care personnel & encourage them to participate them in these activities and aware about PEM
- The essence of research is to build up of a body of knowledge in nursing, as it is an evolving profession.
- Extensive research needs to be conducted on children to find the relationship between nutritional status of the children and mothers knowledge level.

Recommendations

Keeping in view the findings of present study, the following recommendations were made since this study was carried out a small sample, the result can be used only as a guide for further study.

- A similar study on a large sample may help to draw more definite conclusion & make generalization.
- An experimental study can be undertaken with control group.
- A comparative study can be conducted to assess the knowledge of mothers regarding protein energy malnutrition in rural and urban area.

CONCLUSION:-

The study findings implied that the administration of structured teaching programme on prevention of protein energy malnutrition is good method of teaching, Structured teaching programme is a logical solution for imparting knowledge regarding protein energy malnutrition among mothers of under sfive children and, Administration of structured teaching programme will enable the mothers to provide holistic self care as well as comprehensive care to the society on preventing aspect of protein energy malnutrition.

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