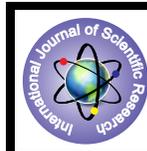


Effectiveness of Planned Teaching Programme Regarding Prevention and Treatment of Protein Energy Malnutrition in Terms of Knowledge and Expressed Practices of Mothers of Under Five Children



Education

KEYWORDS :

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ABSTRACT

EFFECTIVENESS OF PLANNED TEACHING PROGRAMME REGARDING PREVENTION AND TREATMENT OF PROTEIN ENERGY MALNUTRITION IN TERMS OF KNOWLEDGE AND EXPRESSED PRACTICES OF MOTHERS OF UNDER FIVE CHILDREN

INTRODUCTION

Protein energy malnutrition (PEM) is a global problem. Nearly 150 million children under 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 in India suffer from severe PEM, viz., marasmus, kwashiorkor and marasmic kwashiorkor. Worldwide, 20 million children under five years of age are overweight (WHO expert Meeting Childhood Obesity)

Children's health is tomorrow's wealth. The professional who work with the children must have the knowledge of existing feeding practices among mothers and the nutritional status of their children. She must be able to identify the various feeding practices and taboos that exist and which in turn affect the nutritional status of children, should share her skill and knowledge to prevent malnutrition.

Knowledge of weaning foods and practice is an important aspect of preventive and social pediatrics. Programs to improve complementary feeding must conduct local assessments. Local studies should identify local diets and current good practices to be supported, test options for improving the traditional diet and related feeding practices and identify target audiences and effective strategies for reaching them.

Children under the age of five years are most vulnerable group succumb nutritional diseases and these children constitute about 17% of the total population. India, as many as 1000 million children are suffering from malnutrition. Moreover, out of 1000 live births about 100 die before celebrating their first birthday.

Child mortality: the major contributing factors are:

Protein energy malnutrition (PEM) is manifested commonly among under five children (0-5) years. Because mothers of children have inadequate knowledge regarding weaning practices and balanced diet which stands as a primary cause of protein energy malnutrition.

Knowledge of weaning foods and practice is an important aspect of preventive and social pediatrics. Programs to improve complementary feeding must conduct local assessments. Local studies should identify local diets and current good practices to be supported, test options for improving the traditional diet and related feeding practices and identify target audiences and effective strategies for reaching them.

OBJECTIVE

- To assess and evaluate the knowledge of mothers of under five children regarding prevention and treatment of protein energy malnutrition before and after the planned teaching programme.
- To assess and evaluate the expressed practices of mothers of under five children regarding prevention and treatment

of protein energy malnutrition before and after the planned teaching programme.

- To determine the relationship between knowledge and expressed practices scores of mothers of under five children after the planned teaching programme.

Material and method

Setting and subject:

The evaluative approach was considered for present study in order to evaluate the effectiveness of planned teaching programme on prevention and treatment of protein energy malnutrition in mothers of under five children. The research design selected for the study was pre experimental "One group pretest post test design". The present study was conducted in village Bhuddia, Ambala. : The samples of the present study comprise of mother of under five children in village bhuddia, ambala. The total sample for the study was 30. In the present study the Purposive sampling technique was used.

Variables:-

independent variables :- planned teaching programme on prevention and treatment Protein Energy Malnutrition.

dependent variables:-

1 Knowledge of the mothers of under five children regarding prevention and treatment Protein Energy Malnutrition,

2 .Expressed Practices of the mothers of under five children regarding prevention and treatment Protein Energy Malnutrition.

Instruments : data were gathered with the help of structure knowledge questionnaire and expressed Practices checklist by interview technique. The demographic profile sheet and a pre-tested 25 items questionnaire were administered to the subject for assessing knowledge regarding protein energy malnutrition .expressed practices were assessed from the under five mothers by filling the expressed practices checklist.

1. Structure knowledge questionnaire – 25 items
2. Expressed Practices checklist – 15 items

The Structured Knowledge Questionnaire consisted of two parts: **PART A** – It consist of 9 items on background data such as age of the mother ,type of family, total family members ,no of children in the age group of below 5 years ,dietary patterns , mother education, mother occupation , religion ,Total family income per month(In rupees).

PART B-SECTION –I – It Consist of 25 multiple choice items on knowledge covering following content areas like Definition and causes protein energy malnutrition., Signs & Symptoms , complication of protein energy malnutrition, Prevention of protein energy malnutrition. , Treatment of protein energy malnutrition. The test items were multiple choice type .Each items had a

single correct answer. Each correct answer was accorded score one point and every wrong answers was assigned zero score . Thus, the maximum score was 25 on the structured knowledge questionnaire .SECTION –II – It deals with practice checklist to assess mothers expressed practices regarding Protein Energy Malnutrition .It Consist of 15 items i.e.Hygiene habits ,Dietary habits, Health Check up ,Miscellaneous.Each correct answer was given a score of 1 and wrong answer a score of 0 .Total possible score is 15. Analysis and interpretation of the data was done by using inferential statistics based on the objective of the study and the hypothesis to be verified.

InterventionPlanned teaching Programme was structured for developing mothers of under five children knowledge and expressed practices .

the tool develop and used for data collection were based on the extensive review of research and non research literature ,consultation with expert . the content outline of the pkanned teaching programme covered four areas related to knowledgelike Definition and causes protein energy malnutrition.,Signs & Symptoms , complication of protein energy malnutrition,Prevention of protein energy malnutrition. , Treatment of protein energy malnutrition and four areas related to expressed practices i.e.Hygiene habits ,Dietary habits, Health Check up ,Miscellaneous.

To ensure the content validity of the tool, it was submitted along with the blueprint to seven experts from the field of pediatric nursing and maternal and child health nursing, nutritionist and community health nursing,pediatrician and nutritional expert . A few changes were made according to their suggestions, considering the practicability of the tool.

The tool and planned health education programme was translated to hindi by hindi translator which was then validated by a subject expert . A set of Poster were prepared to conducting the planned teaching programme and handout was established by seven experts in the field of nursing and medicine. Content validity of the set of posters were established by seven experts and based on their suggestionschanges were made . The reliability co-efficient for the structured knowledge questionnaire was calculated by using the Kuder Richardson -20 (KR - 20) it was found to be 0.8 and the reliability co - efficient of expressed practices checklist was found to be 0.72 by Kuder Richardson - 20 formula. Thus the structured knowledge questionnaire and expressed practices checklist were found to be significant reliable.

Procedure : Formal administrative permission was obtained from the Sarpanch of Bhuddia village to conduct the study in village. Data were collected from 15th December to 26th December ,2010 .Self Introduction and introduction to the nature of the study were given to the mothers of under five children .To obtain a free and frank response ,the purpose of the study was explained and the subject were assured about the confidentiality of their responses . On day 1st - 3rd the structured knowledge interview Schedule was Conducted individually followed by pretest of expressed practices of prevention and treatment of protein energy malnutrition .Planned teaching programme was conducted for the group in the Anganwadi of Bhuddia village on 4th day. On the days 11th -12th i.e. seventh days after planned teaching programme knowledge and expressed practices posttest identical to pretest were administered in order to evaluate the effectiveness of the planned teaching programme .

Result :

Sample characteristics

Maximum number of mother of under five children (40%) were in the age group of 26-30 years .Majority of them (53.3%) had nu-

clear family.13(43.3%) mothers had 4-5 members in the family . Majority of mothers had 12 (26.7%) children in the age group of 2-3years. 20 mothers (66.6%) out of 30 were vegetarian. 10 mothers (33. 3%) had education up to primary level. Maximum number of mothers 24(80%) were housewife .26(86.6%) mothers of under five children belonged to Hindu religion. Majority of them 12(40%) had more than 5000 income per month.

Table 1:Frequency and Percentage Distribution of mothers N=30

S.NO	SAMPLE CHARACTERISTICS.	F	%
1	AGE OF THE MOTHER (IN YEARS)		
a.	Below 20 years	5	16.7%
b.	21 – 25	10	33.3%
c.	26 – 30	12	40 %
d.	31 years and above	3	10%
2.	TYPE OF FAMILY		
a.	Joint	14	46.7%
b.	Nuclear	16	53.3%
3	TOTAL FAMILY MEMEBERS		
a	2-3	7	23.3%
b	4-5	13	43.3%
c	6-7	5	16.7%
d	8-9.	5	16.7%
4	NO OF CHILDREN IN THE AGE GROUP OF BELOW 5 YEARS		
a	1	5	16.6%
b	2-3	12	40%
c	3-4	8	26.7%
d	More than 5	5	16.7%
5	DIETARY PATTERNS		
a	Vegetarian	20	66.6%
b.	Non vegetarian	10	33.4%
6. MOTHER EDUCATION			
a	Illiterate	8	26.7%
b	Primary	10	33. 4%
C	Secondary	7	23.4%
d	Graduate & above	5	16.5%
7	MOTHER OCCUPATION		
a.	Service	6	20%
b.	House wife	24	80%
c.	Any other	-	-
8.	RELIGION		
a.	Hindu	26	86.7%
b.	Muslim	-	-
c.	Sikh.	-	-
a.	Christian	4	13.3%
9.	TOTAL FAMILY INCOME PER MONTH (IN RUPEES)		
a.	Less than 1000	-	-
b.	1001-3000	10	33.3%
c.	3001-5000	8	27.7%
d.	More than 5000	12	40%

Maximum number of mother of under five children (40%) were in the age group of 26-30 years .Majority of them (53.3%) had nuclear family.13(43.3%) mothers had 4-5 members in the family . Majority of mothers had 12 (26.7%) children in the age group of 2-3years. 20 mothers (66.6%) out of 30 are vegetarian. 10 mothers (33. 3%) had a education up to primary level . Maximum number of mothers 24(80%) were housewife. 26(86.6%) mothers of under five children belonged to Hindu religion. Majority of them 12 (40%) had more than 5000 income per month .

Section II Evaluation of effectiveness of PTP in terms of knowledge of mothers of under five children regarding prevention and treatment of protein energy malnutrition

This section describe the findings related to the Evaluation of effectiveness of PTP in terms of knowledge of mothers of under five children regarding prevention and treatment of protein energy malnutrition .The pre –test and post test knowledge score obtained through structured knowledge questionnaire are describe and analysis using descriptive and inferential statistics . The data were analyzed for the entire test as well as area wise.

Mean ,median and standard Deviation of pre-test and post –test knowledge score were calculated .These are presented in table 2

TABLE 2 Mean Median and Standard Deviation of Pre –Test and Post-Test Knowledge Scores of mother of under five children on a Structured Knowledge Questionnaire.

N=30

Knowledge Score	Mean	Median	SD
Pre-test	13.2	13.5	3.4
Post-test	20.6	21.0	2.7

Maximum score is 25

The data presented in Table 2 indicate that the mean post test knowledge score (20.60) was higher than the mean pre-test knowledge score (13.27).The data further shows that the median of pretest was 13.5 whereas the median of post test was 21.0. The finding also reveals that the post-test scores are more homogeneous (SD 2.7) than the pretest knowledge scores (SD 3.4).

TABLE 3 Area wise Mean, Mean percentage of pre-test and post-test knowledge score obtained by mothers of under five children

N=30

Content Area	Max. possible scores	Mean Scores (Mean% score)		Actual gain cores	Possible gain scores	Modified gain scores
		Pre-test	Post-test			
1.Definition and Causes	2	1.2 (61.7)	1.7 (85)	0.5	0.8	0.62
2.Sign and symptoms , Complication	4	2.5 (62.5)	3.5 (87.5)	1.0	1.5	0.66
3.Prevention	17	8.5 (50)	13.7 (80.5)	5.2	8.5	0.61
4.Treatment	2	1.0 (50)	1.6 (75)	0.6	1	0.6

Data given in Table 3 reveals that the lowest mean percentage of pretest score (50) is in the area of Prevention and treatment of mothers of under five children .This indicate that maximum knowledge deficit in this area followed by 'definition and causes' (61.6%), The lowest knowledge deficit was in the area related 'sign &symptoms and Complication' (62.5%).

Thus, there is knowledge deficit in all the areas depicting inadequate knowledge of mother of under five children regarding prevention and treatment of protein energy malnutrition. The data further indicate that the post – test mean percentage knowledge score in all the content areas were higher than the pretest mean percentage knowledge score .It suggests the effectiveness of PTP

It also reveals that the maximum gain has been in the area of S/S and complication of protein energy malnutrition (0.66). The second highest gain in the area of definition and causes of protein energy malnutrition (0.62), followed by Prevention of

protein energy malnutrition and treatment of protein energy malnutrition (0.61), the minimum gain has been in the area of treatment of protein energy malnutrition (0.6) .Thus there is gain in knowledge in all learning areas, thereby indicating the effectiveness of the PTP.

TABLE 4 Mean, Mean Difference, Standard Deviation of Difference, Standard Error of Mean Difference from Pre-test to Post-Test Knowledge Scores and t Value

N=30

Knowledge Score	Mean	Mean _D	SD _D	SE _{MD}	t _{value}
Pre-test	13.5				
Post- test	20.6	7.3	3.1	0.5	12.8*

t 29≥2.045 Significant at 0.05 level

* Significant at 0.05 level

The data presented in table 4 show that t value is significant at 0.05 levels for df 29. The computed t value, t (29) = 12.8P.05 indicates a significant difference between the pretest knowledge scores and posttest knowledge score. Thus ,it is established that the difference obtained in the mean pre-test and post-test knowledge scores was a true difference and not by chance .Hence, null hypothesis H01 was rejected and the research hypothesis H1 was accepted indicating that the PTP on prevention and treatment of protein energy malnutrition was an effective method for increasing the knowledge of mothers of under five children regarding protein energy malnutrition .

TABLE 5 Area Wise Mean Difference, Standard Deviation of Difference, Standard Error of Mean Difference and t Value of Pre-test and Post-test Knowledge Scores.

N=30

Content Area	Pre- test to Post- test			t value
	Mean _D	SD _D	SE _{MD}	
1.Definition andCauses	0.46	0.81	0.15	3.12*
2.Sign and symptoms , Complication	1.00	1.08	0.19	5.05*
3.Prevention	5.2	2.84	0.52	10.01*
4.Treatment	.600	1.10	0.20	2.98*

t 29≥2.045 Significant at 0.05 level

* Significant at 0.05 level

The data presented in Table 5 reveals that obtained t value in each areas were significant at 0.05 level. It indicates that the differences between the mean pretest and post test knowledge scores in each area was the true difference and not by chance.

This shows that PTP was effective in enhancing the knowledge of mothers of under five children in all the content areas regarding protein energy malnutrition .

Section III Evaluate of effectiveness of PTP in terms of Expressed practices of mothers of under five children regarding prevention and treatment of protein energy malnutrition

.This section describes the finding related to evaluation of the effectiveness of planned teaching programme in terms of expressed practices of mothers of under five regarding protein energy malnutrition . The pre-test and post –test practice scores obtained through a practice checklist.

TABLE 6 Item Wise Frequency and Percentage Distribution of Expressed Practices Score obtained by mothers of under five Children N=30

S.No	Statement	Pretest		Posttest	
		Yes f (%)	No f (%)	Yes F (%)	No f (%)
1	Child taking meal on time	25(83.3)	5(16.6)	30 (100%)	-
2	Child wears footwear.	21 (70%)	9 (30%)	30 (100%)	-
3.	Child taking soft mixture of rice and dhal as a complementary food	30 (100%)	-	30 (100%)	-
4.	Mother practice demand feeding	30(100%)	-	30 (100%)	-
5	Mother washing the vegetables and fruits before eating	30(100%)	-	30(100%)	-
6	Mother maintaining personnel hygiene of the child	30(100%)	-	30(100%)	-
7	Mother washing hands with soap and water before cooking ,serving and feeding the child	30(100%)	-	30(100%)	-
8	Mother using safe water in home.	30(100%)	-	30(100%)	-
9	Mother getting health education regarding practices from health personnel.	23(76.6%)	7(23.3%)	26(86.6%)	4(13.3)
10	Mother regularly checking the weight of the childandmaintaining a record.	25(83.3%)	5(16.6%)	30(100%)	-
11	Mother taking child to pediatrician in regular interval.	30(100%)	-	30(100%)	-
12	Mother wash vegetable and fruits before cutting	27(90%)	3(10%)	30(100%)	-
13	Mother include egg or soybean daily in child diet Child taking meal on regular interval in a day. Child getting nutritional food from Anganwadi.	16(53.3%)	14(46.6%)	23	7(23.3)
14		25(83.3%)	5(16.6%)	30(100%)	--
15		24 (80%)	6(20%)	30(100%)	--

This section describes the findings related to assess the expressed practices of mothers of under five children regarding protein energy malnutrition. The expressed practice scores were obtained through the expressed practices checklist.

The data presented in table 6 indicates the item wise frequency distribution and percentage (%) of mothers of under five children .There were 6 statements on Dietary habits ,2 on Hygienic habits ,5 on Health checkups, and 2 on miscellaneous .

Finding further of the pretest reveals that 100% of children taking meal on time ,taking soft mixture of dhal as a complementary food ,100% of mothers of under five children practicing demand feeding ,washing the vegetables and fruits before eating, maintaining personnel hygiene of the child, washing hands with soap and water before cooking, serving and feeding the child , using safe water in home, taking child to pediatrician in regular interval. 90% of mothers of under five childrens wash vegetables and fruits before cutting and 10 % did not wash vegetables and fruits before cutting.83.3% mothers regularly checking the weight of the child and maintaining a record and 16.6% mothers did not regularly checking the weight of the child and maintaining a record meal on regular interval in a day.83.3% children taking meal on regular interval in a day and maintaining a record and 16.6% did not taking meal on regular interval in a day and maintaining a record.76.6% Mother getting health education regarding practices from health personnel and 23.3% did not getting health education regarding practices from health personnel .80% getting nutritional food from Anganwadi and 23.3% did not getting health education regarding practices from health personnel.

Finding further of the posttest reveals that 100% of children taking meal on time, taking soft mixture of dhal as a complementary food .100% of mothers of under five children practicing demand feeding ,washing the vegetables and fruits before eating, maintaining personnel hygiene of the child, washing hands with soap and water before cooking, serving and feeding the child , using safe water in home, taking child to pediatrician in regular interval, regularly checking the weight of the child and maintaining a record, getting health education regarding practices from health personnel, wash vegetables and fruits before cutting, taking meal on regular interval in a day, getting nutritional food from Anganwadi.86.6% Mother getting health education regarding practices from health personnel and 13.3% did not getting health education regarding practices from health personnel.76.6% Mother include egg and soyabeen daily in the

child diet and 23.3% Mother did not include egg and soyabeen daily in the child diet

Mean, Median and Standard Deviation of pre-test and post-test expressed practices scores were calculated

TABLE 7 Mean, Median and Standard Deviation of Pre –Test and Post-Test Expressed Practices Score of mothers of under five children N=30

Expressed Practices Score	Mean	Median	SD
Pre-test	13.20	13	1.40
Post-test	14.63	15	0.56

Maximum Score-15

The data presented in Table 7 indicate that the mean post test expressed practice score (14.63) was higher than the mean pre-test expressed practices score (13.20), suggesting the effectiveness of PTP .The finding also reveal that the standard deviation of post test scores is(0.56) less than Standard deviation of than the pre-test score (1.40) .This indicate the marginal reduction in the variability of scores.

TABLE 8 Area wise Mean, Mean Percentage of Pre-test and Post-test expressed practices score obtained by mothers of under five children N=30

Content Area	Max. possible scores	Mean scores (Mean % score)		Actual gain scores	Possible gain scores	Modified gain scores
		Pre-test	Post-test			
1.Dietary habits	6	5.00 (83.3)	5.73 (95)	0.73	1.00	0.73
2.Hygienic habits	2	1.43 (70)	1.86 (90)	0.43	0.56	0.76
3.Health check ups	5	4.90 (98)	5.00 (100)	0.10	1.10	0.09
4.Miscellaneous	2	1.93 (95)	2.00 (100)	0.06	0.06	1

Data given in Table 8 reveals that the lowest mean percentage of pretest score (70%) is in the area of Hygienic habits .This indicate that maximum expressed practices deficit in this area followed by 'dietary habits ' (83.3%)and miscellaneous (95%) .The lowest deficit was in the area related 'health checkup' (98%).

It also shows that the maximum gain has been in the area of, miscellaneous (1), hygienic habit (0.76) dietary habit (0.73) , health checkup (0.09)

Thus there is gain in expressed practices in all learning in all learning areas , thereby indicating the effectiveness of the PTP enhancing the expressed practices mothers of under five children's .

TABLE 9 Mean, Mean Difference, Standard Deviation of Difference, Standard Error of Mean Difference from Pre-test to Post -Test expressed Practices Score and t Value N=30

Practice Score	Mean	Mean _D	SD _D	SE _{MD}	t value
pre-test	13.2				
post- test	14.6	1.43s	0.98	0.17	8.4*

t 29≥2.045 Significant at 0.05 level

*Significant at 0.05 level

The data presented in table 9 show that t value is significant at 0.05 levels for df 29. The computed t value, t(29) = 8.4 indicates a significant difference between the pretest expressed practices score and posttest expressed practices score. Thus, it is established that the difference obtained in the mean pre-test and post-test expressed practices score was true difference and not by chance .Hence, null hypothesis H02 was rejected and the research hypothesis H2 was accepted.

It indicates that the PTP on prevention and treatment of protein energy malnutrition was an effective method of enhancing the expressed practices of mothers of under five children regarding protein energy malnutrition.

TABLE 10 Area Wise Mean Difference, Standard Deviation of Difference, Standard Error of Mean Difference and t Value of Pre-test and Post-test expressed Practices Score.

N=30

Content Area	Pre- test to Post- test			t value
	Mean _D	SD _D	SE _{MD}	
1.Dietary habit	0.73	1.04	0.191	3.83*
2.Hygienic habit	0.10	0.30	0.056	1.79NS
3.Health checkup	0.06	0.69	0.12	0.52*
4.Miscellaneous	0.43	0.817	0.14	2.92*

t 29≥2.045 Significant at 0.05 level

*Significant at 0.05 level

NS= Not Significant at 0.05 level

The data presented in Table 10 shows that obtained t value in areas of hygienic habit was not found to be statistically significant as evident from t value of 1.79for df 29 at 0.05 level of significance and others t value were significant at 0.05 level. .This indicates that the expressed practices regarding prevention and treatment of protein energy malnutrition in mothers of under five children did not significantly improve in area of hygienic habits .It indicates that the differences between the mean pre-test and post test knowledge scores in each area was the true difference and not by chance and was not a true difference. Thus it can be inferred that the planned teaching programme on prevention and treatment of protein energy malnutrition in mothers of under five children was effective in improving the expressed practices.

Section IV Correlation between knowledge and practices of mothers of under five children regarding prevention and treatment of protein energy malnutrition

This section describe the correlation between Pre-test knowledge and expressed practices score Post -test knowledge and expressed practices score

TABLE 11 Correlation between Knowledge Score and expressed Practices Score Obtained By mothers of under five children

N=30

Test	Knowledge Score		Expressed Practices score		R
	Mean	SD	Mean	SD	
Pre test	13.2	3.4	13.2	1.40	0.22
Post test	20.6	2.7	14.63	0.56	0.39*

r (28)≥ .361 Significant at 0.05 level

*Significant at 0.05 level

The finding in the table 11 reveals that the coefficient of correlation between pretest knowledge score and skill scores is 0.22, suggesting a low correlation between pretest knowledge and expressed practices score of mothers of under five children regarding protein energy malnutrition .The computed r value (0.22) indicates that the positive correlation between the pretest knowledge scores and practice scores is not significant at 0.05 level.

Further, findings in table also reveal that coefficient of correlation between post test knowledge scores is 0.39 indicating a significant relationship between the post test knowledge scores and expressed practices scores at 0.05 level of significance .The finding suggest that there is marked relationship between the post test knowledge scores and expressed practices scores of mothers of under five children regarding protein energy malnutrition. Thus, null hypothesis H03 was rejected and research H3 was accepted.

This suggest that PTP was effective in enhancing the knowledge as well as the expressed practices of mothers regarding protein energy malnutrition .

CONCLUSION

The following conclusions are drawn from the finding of the study

- Deficit in knowledge regarding prevention and treatment of protein energy malnutrition in a selected group of mothers of under five children in all the content areas in varying degrees.
- The knowledge deficit was maximum in the area of prevention and treatment protein energy malnutrition and minimum in the complication of protein energy malnutrition.
- The PTP was effective in enhancing the knowledge of mothers of under five children regarding prevention and treatment of protein energy malnutrition
- Deficit in expressed practices regarding prevention and treatment of protein energy malnutrition in a selected group of mothers of under five children in all the content areas in varying degrees.
- The deficit expressed practices was maximum in the area of Miscellaneous of prevention and treatment protein energy malnutrition and minimum in the health checkups of prevention and treatment of protein energy malnutrition .
- The PTP was effective in enhancing the expressed practices of mothers of under five children regarding prevention and treatment of protein energy malnutrition.
- Mothers of under five children gained knowledge in all the

content areas. However higher mean percentage gain was in the area of Signs & Symptoms and complication of protein energy malnutrition.

Mothers of under five children gained Expressed practices in all the content areas. However higher mean percentage gain was in the area of Miscellaneous and lowest However higher mean percentage gain was in the area of health checkups. Thus, the PTP on prevention and treatment of protein energy malnutrition was effective in terms of enhancing the knowledge as well as expressed practices of mothers of under five children regarding prevention and treatment of protein energy malnutrition.

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