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A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge and Attitude Regarding Vitamin A Deficiency and Its Prophylaxis among Mothers of Under Five Children at Selected village at Tamilnadu

Roslin Mangaiyarkarasi. M.[1], Kumudhavalli. D[2], R. Karthi[3]

[1]M.Sc (N) E. S. College of Nursing, Villupuram, Tamilnadu
[2]Assistant Professor, E. S. College of Nursing, Villupuram, Tamilnadu
[3]Professor cum Vice Principal, E. S. College of Nursing, Villupuram, Tamilnadu

Corresponding Author: Kumudhavalli. D

ABSTRACT

Aim: to assess the effectiveness of structured teaching programme on knowledge and attitude regarding vitamin A deficiency and its prophylaxis among mothers of under five children.

Objectives: (1). To assess the knowledge and attitude among mothers of under five children on vitamin A deficiency and its Prophylaxis. (2). To find the effectiveness of Structured Teaching Programme in terms of gaining knowledge and attitude of mothers regarding Vitamin A deficiency and its prophylaxis for under five children. (3). To find association between the pre test level of knowledge and attitude among mothers of under five children with their selected demographic variables.

Methodology: A pre experimental research design was adopted for the study. 50 samples were selected by using non probability convenience sampling technique. The pre and post test level knowledge and attitude was assessed by using structured knowledge questionnaires and attitude scale respectively.

Results: The pre test mean was 7.76 with the standard deviation of 2.17 and the post test mean was 16.68 with the standard deviation of 1.81. The mean difference of pre and post test is 8.92; standard error is 0.281. The 'T' value is 31.74 is Highly Significant at $p<0.05$.The pre test mean was 8.98 with the standard deviation of 3.47 and the post test mean was 24.56 with the standard deviation of 3.45. The mean difference of pre and post test is 15.58; standard error is 0.43. The 'T' value is 36.23 is Highly Significant $p<0.05$. Hence it indicates the knowledge and attitude level of mothers are improved after structured teaching programme.

Conclusion: The study concluded that structured teaching programme was effective and improved knowledge and attitude regarding vitamin A deficiency and its prophylaxis among mothers of under five children.

Key words: structured teaching programme, Vitamin A, Prophylaxis

INTRODUCTION

Children are an embodiment of our dreams, hopes for the future. They are wet clay in the potters hands, handled with care they become something beautiful else. They break and become discarded. They are the most vulnerable group in the society.

Nutrition is recognized as an important determinant of health and development of societies. It is estimated that each year 55% of deaths among children under five can be either directly or indirectly is due to hunger and malnutrition in developing countries including India. Apart from the protein energy malnutrition, inadequate intake of micronutrients such as Vitamin A and Vital Minerals (Iron,

Calcium, Iodine and Zinc) are recognized to affect younger children.

Vitamin-A deficiency is one of the major public health problems among Children. In children, Vitamin-A deficiency disorder is the leading cause of preventable visual impairment and blindness. Vitamin-A was estimated to affect between 75 and 254 million preschool children each year. Vitamin A deficiency is the second most important factor for global blindness. Every year 2,50,000 to 500,000 children become blind partially or totally due to vitamin A deficiency and it lowers the resistance power of these children against infection

WHO/UNICEF has recommended that vitamin A supplementation should be part of routine and supplemental immunization activities in all countries where vitamin A deficiency is, or is likely to be, a public health problem, which includes India as well. It has been recently suggested that there is a unique opportunity to increase high-dose vitamin A supplementation at regular immunization contact and through National Immunization Days (NIDs); many countries have already adopted the latter option.

Even though many National Programmes are being conducted on nutritional deficiencies, the investigator has observed reported cases of blindness due to vitamin A deficiency during her working period. While conducting the survey of administration of vitamin A suspension as every six months for under five children most mothers are not aware and not administered vitamin A suspension after the 2^{nd} dose. Hence it is essential for the parents especially mothers to have adequate knowledge about the vitamin A prophylaxis and supplementation for the proper health of their children. Mothers need more instruction and information regarding vitamin A supplementation. So, the investigator structured teaching program is an important and effective method by which mothers can improve their knowledge. This led to the selection of problem for research study.

STATEMENT OF THE PROBLEM:

A study to assess the Effectiveness of Structured Teaching Programme on Knowledge and Attitude regarding Vitamin A Deficiency and its prophylaxis among mothers of under five children at selected village at Tamilnadu.

OBJECTIVES

- To assess the knowledge and attitude among mothers of under five children on vitamin A deficiency and its Prophylaxis.
- To find the effectiveness of Structured Teaching Programme in terms of gaining knowledge and attitude of mothers regarding Vitamin A deficiency and its prophylaxis for under five children.
- To find association between the pre test level of knowledge and attitude among mothers of under five children with their selected demographic variables.

HYPOTHESIS

H1: There will be significant difference between the pre and post test level of knowledge regarding vitamin A deficiency and its prophylaxis.

H2: There will be significant difference between the pre and post test level of attitude regarding vitamin A deficiency and its prophylaxis.

H3: There will be significant association between pre test knowledge score on vitamin A deficiency and its prophylaxis among mothers of under five children with selected demographic variables.

H4: There will be significant association between pre test attitude score on vitamin A deficiency and its prophylaxis among mothers of under five children with selected demographic variables.

MATERIAL & METHODS

A pre experimental research design was adopted for the study. The study was conducted at selected village at Villupuram district. 50 samples were selected by using non probability convenient sampling

technique. The pre and post test level knowledge and attitude was assessed by using structured knowledge questionnaires and attitude scale respectively.

RESULT AND DISCUSSION

Table 1: Frequency and Percentage distribution of pre and post test level of knowledge among mothers of under five children on vitamin A deficiency and its Prophylaxis. N=50

Level of Knowledge	Pre Test		Post Test	
	Frequency	Percentage	Frequency	Percentage
Inadequate Knowledge	42	84%	0	0%
Moderate Knowledge	8	16%	9	18%
Adequate Knowledge	0	0%	41	82%

Table 1 shows that among 50 samples, in pre test level of knowledge 42 (84%) had inadequate knowledge, 8 (16%) had moderate knowledge and none of them (0%) had adequate knowledge and in post test level of knowledge among 50 samples none of them (0%) had inadequate knowledge, 9 (18%) had moderate knowledge and 41 (82%) had adequate knowledge.

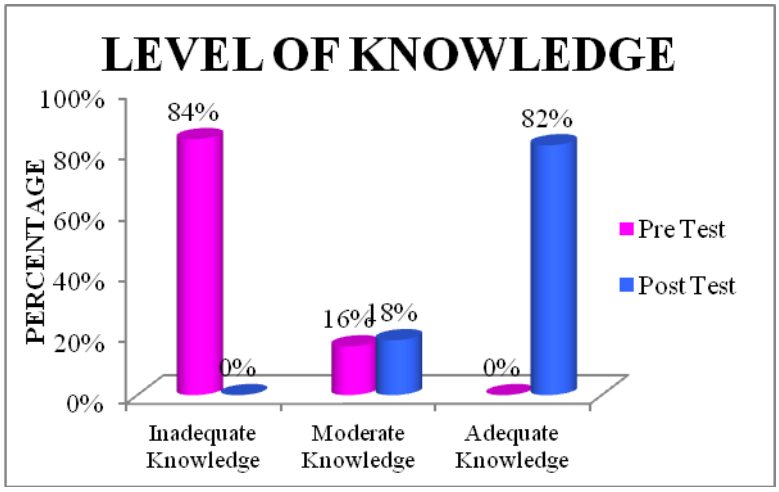

Table 2: Frequency and Percentage distribution of pre and post test level of attitude among mothers of under five children on vitamin A deficiency and its Prophylaxis. N=50

Level of Attitude	Pre test		Post test	
	Frequency	Percentage	Frequency	Percentage
Negative Attitude	40	80%	0	0%
Neutral Attitude	10	20%	8	16%
Positive Attitude	0	0%	42	84%

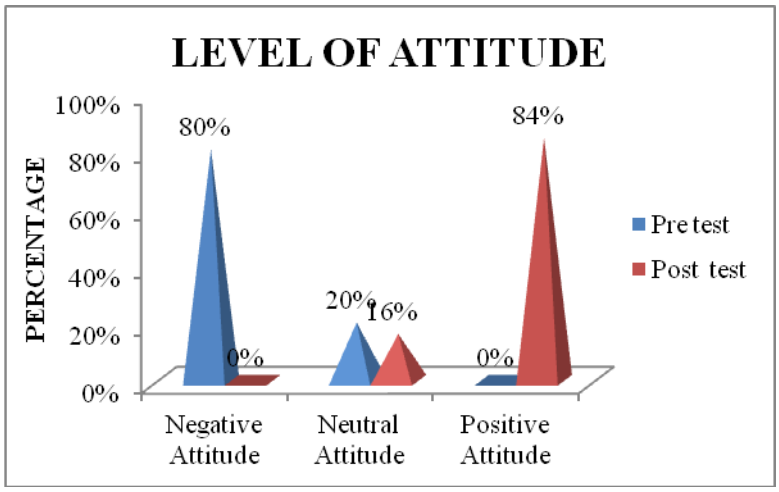

Table 2 shows that in pre test level of attitude among 50 samples40 (80%) had negative attitude, 10 (20%) had Neutral attitude and none of them (0%) had positive attitude and in post test level of attitude among 50 samples none of them (0%) had negative attitude, 8 (16%) had neutral attitude and 42 (84%) had positive attitude.

Table 3: Effectiveness of structured teaching programme on knowledge and attitude regarding vitamin A deficiency and its prophylaxis among mothers of under five children. N=50

	Pre test		Post test		Mean difference	Standard error	T value
	Mean	Standard deviation	Mean	Standard deviation			
Knowledge	7.76	2.17	16.68	1.81	8.92	0.281	31.74* HS
Attitude	8.98	3.47	24.56	3,45	15.58	0.43	36.23*HS

**significant at p<0.05*

Table 4: Association between pre level of knowledge with their selected socio demographic variables. N=50

S. No	Demographic Variables	Inadequate Knowledge	Moderate Knowledge	Adequate Knowledge	Chi Square	P value
1	Age of mother				8.277	0.406 NS
	a. 18-20 years	0	0	0		
	b.21-23years	12	2	0		
	c.24-26 years	13	1	0		
	d.27-29 years	15	2	0		
	e.30 and above	2	3	0		
2	Educational qualification				14.36	0.72 NS
	a. No formal education	0	0	0		
	b. Primary school	3	0	0		
	c. High school	22	1	0		
	d. Higher secondary	15	3	0		
	e. Graduate	2	4	0		
3	Occupation				5.357	0.718 NS
	a. Daily wages	0	0	0		
	b. Govt. employee	0	0	0		
	c. Private employee	6	4	0		
	d. Business	0	0	0		
	e. Housewife	36	4	0		
4	Family monthly income				9.325	0.315 NS
	a. <5000	0	0	0		
	b.5001-10000	3	0	0		
	c.10001-15000	15	0	0		
	d.15001-20000	17	3	0		
	e. >20000	7	5	0		
5	Religion				0.828	0.991 NS
	a. Hindu	38	8	0		
	b. Christian	4	0	0		
	c. Muslim	0	0	0		
	d. others	0	0	0		
6	Type of family				4.44	0.349 NS
	a. Nuclear family	22	1	0		
	b. Joint family	18	6	0		
	c. Extended family	2	1	0		
7	Dietary habits				0.396	0.82 NS
	a. Vegetarian	2	0	0		
	b. Non Vegetarian	40	8	0		
8	No. of children				0.951	0.917 NS
	a. One	33	5	0		
	b. Two	9	3	0		
	c. Three or more.	0	0	0		
9	Previous knowledge regarding vitamin A				20.96	0.00002* S
	a. Yes	3	6	0		
	b. No	39	2	0		
10	Source of information				25.21	0.0003* S
	a. Media	0	1	0		
	b. Health Worker	2	5	0		
	c. Relatives	1	0	0		
	d. Never Heard	39	2	0		

**significant at p<0.05*

Table 3 reveals that in Knowledge pre test mean was 7.76 with the standard deviation of 2.17 and the post test mean was 16.68 with the standard deviation of 1.81. The mean difference of pre and post test is 8.92; standard error is 0.281. The 'T' value

is 31.74 is Highly Significant at p <0.05 in Attitude the pre test mean was 8.98 with the standard deviation of 3.47 and the post test mean was 24.56 with the standard deviation of 3.45. The mean difference of pre and post test is 15.58; standard error is 0.43. The 'T' value is 36.23 is Highly Significant at p<0.05. Hence the finding indicates that the knowledge and attitude level of mother of under five children are improved after structured teaching programme.

Table 4 shows that there is significant association between level of knowledge with previous knowledge regarding vitamin A and source of information at p <0.05 and there is no significant association between the level of knowledge with age of mother, Educational qualification, occupation, Family monthly income, Religion, type of family, Dietary habits and No .of children.

Table 5: Association between pre test level of attitude with their selected socio demographic variables. N=50

S. No	Demographic Variables	Negative	Neutral	Positive	Chi Square	P value
1	Age of mother					
	a. 18-20 years	0	0	0	13.04	0.110 NS
	b.21-23years	12	2	0		
	c.24-26 years	13	1	0		
	d.27-29 years	14	3	0		
	e.30 and above	1	4	0		
2	Educational qualification					
	a. No formal education	0	0	0	10.8	0.213 NS
	b. Primary school	3	0	0		
	c. High school	21	2	0		
	d. Higher secondary	14	4	0		
	e. Graduate	2	4	0		
3	Occupation					
	a. Daily wages	0	0	0	3.125	0.926 NS
	b. Govt. employee	0	0	0		
	c. Private employee	6	4	0		
	d. Business	0	0	0		
	e. Housewife	34	6	0		
4	Family monthly income					
	a. <5000	0	0	0	5	0.757 NS
	b.5001-10000	3	0	0		
	c.10001-15000	13	2	0		
	d.15001-20000	17	3	0		
	e. >20000	7	5	0		
5	Religion					
	a. Hindu	36	10	0	1.087	0.982 NS
	b. Christian	4	0	0		
	c. Muslim	0	0	0		
	d. others	0	0	0		
6	Type of family					
	a. Nuclear family	21	2	0	3.43	0.488 NS
	b. Joint family	17	7	0		
	c. Extended family	2	1	0		
7	Dietary habits					
	a. Vegetarian	1	1	0	1.171	0.556 NS
	b. Non Vegetarian	39	9	0		
8	No. of children					
	a. One	32	6	0	1.754	0.882 NS
	b. Two	8	4	0		
	c. Three or more.	0	0	0		
9	Previous knowledge regarding vitamin A					
	a. Yes	1	8	0	32.55	0.00001* S
	b. No	39	2	0		
10	Source of information					
	a. Media	0	1	0	32.75	0.00001* S
	b. Health Worker	1	6	0		
	c. Relatives	0	1	0		
	d. Never Heard	39	2	0		

**significant at p<0.05*

Table 5 shows that there is significant association between level of attitude with previous knowledge regarding vitamin A and source of information at p

<0.05 and there is no significant association between the level of attitude with age of mother, Educational qualification, occupation, Family monthly income, Religion, type of family, Dietary habits and No .of children.

DISCUSSION

The first objective of the study is to assess the knowledge and attitude among mothers of under five children on vitamin A deficiency and its Prophylaxis.

The finding shows that in pre test level of knowledge majority of majority of mothers 42 (84%) had inadequate knowledge and 8 (16%) had moderate knowledge. In post test level of knowledge majority of mothers41 (82%) had adequate knowledge, 9 (18%) had moderate knowledge.

In level of attitude that in pre test majority of mothers 40 (80%) had negative attitude, 10 (20%) had Neutral attitude. In post test majority of mothers42 (84%) had positive attitude, 8 (16%) had neutral attitude.

The second objective of the study is to find the effectiveness of Structured Teaching Programme in terms of gaining knowledge and attitude of mothers regarding Vitamin A deficiency and its prophylaxis for under five children.

The finding of the study shows that In Knowledge pre test mean was 7.76 with the standard deviation of 2.17 and the post test mean was 16.68 with the standard deviation of 1.81. The mean difference of pre and post test is 8.92; standard error is 0.281. The 'T' value is 31.74 is Highly Significant at p<0.05 it indicates that the knowledge level of mother of under five children are improved after structured teaching programme. Hence hypothesis H1is accepted.

In Attitude the pre test mean was 8.98 with the standard deviation of 3.47 and the post test mean was 24.56 with the standard deviation of 3.45. The mean difference of pre and post test is 15.58; standard error is 0.43. The 'T' value is 36.23 is Highly Significant p<0.05 it indicates that the knowledge level of mother of under five children are improved after structured teaching programme. Hence hypothesis H2 is accepted.

The third objective of the study is to association between the pre test level of knowledge and attitude among mothers of under five children with their selected demographic variables.

The finding of the study shows that there is significant association between level of knowledge with previous knowledge regarding vitamin A and source of information at p<0.05. Hence the H3 is accepted.

The finding of the study shows that there is significant association between level of attitude with previous knowledge regarding vitamin A and source of information at p<0.05. Hence the H4 is accepted.

CONCLUSION

The study finding reveals that in level of knowledge pre test mean was 7.76 with the standard deviation of 2.17 and the post test mean was 16.68 with the standard deviation of 1.81. The knowledge 'T' value is 31.74 is Highly Significant at p<0.05. In level of attitude the pre test mean was 8.98 with the standard deviation of 3.47 and the post test mean was 24.56 with the standard deviation of 3.45. The attitude 'T' value is 36.23 is Highly Significant p<0.05. Hence the study concluded that structured teaching programme was effective and improved knowledge and attitude regarding vitamin A deficiency and its prevention among mothers of under five children.

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Ethical Approval: Approved

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