Original Research Paper | **Nursing**

STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING ON KNOWLEDGE REGARDING 'VITAMIN A' DEFICIENCY IN CHILDREN BETWEEN 3-5YRS OF AGE AMONG ANGANWADI WORKERS.

Payal R. Burbure	PG Student Smt. Radhikabai Meghe Memorial College of Nursing, Sawangi (Meghe) Wardha, Maharashtra, India.
Deeplata Mendhe	Assistant Professor Smt. Radhikabai Meghe Memorial College of Nursing, Sawangi (Meghe) Wardha, Maharashtra, India.

ABSTRACT   **Introduction:** School age is the active growing phase of childhood. Pre school age is a dynamic period of growth as well as development and nutritional deficiency may lead to hamper it,

Objectives: To assess the existing knowledge regarding vitamin A deficiency in children between 3-5 yrs of age group. To assess the effectiveness of planned teaching on knowledge regarding vitamin A deficiency in children between 3-5 yrs of age among anganwadi workers. To associate the post-test knowledge score with selected demographic variables.

Methods and Materials: The study was a one group pre-test post-test research design. Population for the study was anganwadi workers in selected area. The sample size was 60 which fulfils inclusion criteria.

Results: the mean pre test knowledge score was 10.39 ± 2.428 where as post test score was 18.91 ± 1.897.

Discussion: there was increased knowledge level of anganwadi workers in post test so my teaching was effective. Same finding revealed by the study done by Mr. Kuldeep Singh, Karnataka. And result shows that in pre test, mean score was 13.81±3.342 whereas post test score was 21.74±2.674. Study concluded that structure teaching program is effective tools to improve the knowledge of mothers of under five children.

KEYWORDS :

1. Introduction

The healthy population is the wealth of the Nation Children are the most vital human resource a country possesses. Children hold the potential and set the limit of future development of any country. "Better the Nutritional Status of the children, higher will be the Nation rise". Today's children are tomorrow's citizen who should be healthy. Therefore their nutritional status is of great significance. Good nutrition is the basic component of healthy growth development and for maintaining health throughout life.

National Nutrition Monitoring Bureau (NNMN 1993) explained that target oriental program in nutrition, health and food supply over the years have controlled severe vitamin deficiency problems among the vulnerable groups in India. In terms of nutrition and health education (NHE); day care centers like Balwadies , Anganwadies and Crèches can play a crucial role because children are their foremost part of the day.[3]

Vitamin A deficiency affects more than 127 million Preschool children. 1,2 It is stimated that 20%-50% of infant mortality can be reduced by improving the status of vitaminA levels in this group of population. 3 Deficiency of vitamin A can extend through school age and adolescent years into adulthood. In India the prevalence is more than the WHO critical limits in most states. However, as per the National Nutrition Monitoring Bureau (NNMB) estimates it is higher in the states of Andhra Pradesh and West Bengal.

2. Problem Statement

Study to assess the effectiveness of planned teaching on knowledge regarding vitamin A deficiency in children between 3-5 yrs of age among anganwadi workers.

3. Objectives

1) To assess the existing knowledge regarding vitamin A deficiency in children between 3-5 yrs of age group.
2) To assess the effectiveness of planned teaching on knowledge regarding vitamin A deficiency in children between 3-5 yrs of age among anganwadi workers.
3) To associate the post-test knowledge score with selected demographic variables.

4. Methodology

1) **Research approach:** Interventional approach
2) **Research design:** The research design is One Group Pre test Post test Design

3) **Setting of the study:** This study was conducted in Grampanchayat Borgaon Meghe.
4) **Sample:** Anganwadi workers
5) **Sampling technique:** Non-probability convenient sampling technique.
6) **Sample size:** Sample size for this study is 60.
7) **Tool:** Structured knowledge questionarrier including demographic variables and planned teaching was used for the study.

Sampling criteria
• **Inclusion criteria:**
   Anganwadi workers

• Who are willing to participate in the study.
• Who are present at the time of data collection
•
• **Exclusion criteria:**
• Those workers who have attended the same program.

5. Result

The present study has been taken up to assess the Effectiveness of planned teaching on knowledge regarding vitamin A deficiency in children between 3-5 yrs of age among anganwadi workers. Analysis and interpretation is based on the objectives of the study. A structured questionnaire to collect knowledge was used for data collection. The analysis was done with the help of inferential and descriptive statistics.

Table 1. Percentage wise distribution of Effectiveness of planned teaching on knowledge regarding vitamin A deficiency in children among 3-5 yrs of age among anganwadi workers.

Level of knowledge score	Score range	Percentage Score	Knowledge Score	
			Pre Test	Post Test
Poor	1-5	0-20 %	1	0
Average	6-10	21-40 %	56	0
Good	11-15	41-60%	40	3
Very good	16-20	61-80%	3	78
Excellent	21-25	81-100%	0	19
Minimum score			5	12
Maximum score			16	22
Mean score			10.39 ± 2.428	18.91 ± 1.897
Mean %			41.56	75.64

The above table and below graph shows that in **Pre-test** 1 (1%) of anganwadi workers were having poor level of knowledge score, 56(56%) of anganwadi workers were having average level of knowledge score, 40(40%)of anganwadi workers were having good level of knowledge score, only 3(3%) had very good level of knowledge score. The minimum score was 5 and the maximum score was 16, the mean score was 10.39 ± 2.428 with a mean percentage score of 41.56.

The above table and below graph shows that in **Post- test** 3(3%) of anganwadi workers were having good level of knowledge score, 78(78%) of anganwadi workers were having very good level of knowledge score. And 19(19%) of them had excellent level of knowledge score. The minimum score was 12 and the maximum score was 22, the mean score was 18.91 ± 1.897 with a mean percentage score of 75.64.

This section deals with the effectiveness of planned teaching on knowledge regarding vitamin A deficiency in children among 3-5 yrs of age among anganwadi workers. The hypothesis is tested statistically with distribution of pre test and post test mean and standard deviation and mean difference. The levels of knowledge during the pre test and post test are compared to prove the effectiveness of planned teaching't' test and tabulated 't' value is compared with calculated 't' value. Also the calculated 'p' values are compared with acceptable 'p' value i.e. 0.05. Hence, H1 hypothesis is accepted for the present study
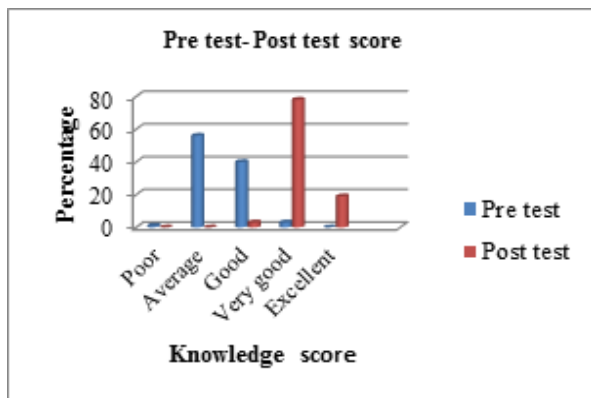

Figure 1: Effectiveness of planned teaching on knowledge regarding vitamin A deficiency in children among 3-5 yrs of age among anganwadi workers.

6. Discussion
The major findings of this study shows that the pre test score of anganwadi workers is 1(1%) of anganwadi workers were having poor level of knowledge score, 32(56%) of anganwadi workers were having average level of knowledge score, 24(40%) of anganwadi workers were having good level of knowledge score, only 2(3%) had very good level of knowledge score and 1(1%) of anganwadi workers were having poor level of knowledge score. The post test score is 2(3%) of adolescent girls were having good level of knowledge score, 39(78%) of anganwadi workers were having very good level of knowledge score and 19(19%) of them had excellent level of knowledge score after administering planned teaching. The statistical analysis was done by 't' test where the overall calculated 't' value was 54.79 when compared to the tabulated 't' value with degree of freedom at the level of 0.05 significance was higher showing high level of significance making the conclusion that planned teaching is effective in improving the knowledge of anganwadi workers on vitamin A deficiency.

Similar findings were found in the study was designed to evaluate the level of Vitamin A deficiency awareness among the Middle aged men (the age group from 30 to 60) living in Chennai. The study was focused on the perceptions of knowledge about Vitamin A, causes and risk factors associated with the disease. A total of 50 men volunteered and successfully completed the survey. the

participants were from both medical and non-medical fields (Graduates). the questionnaire used in the study was written in English and consisted of a total of 12 questions.

Another study done by Mr. Kuldeep Singh in Karnataka on to assess the effectiveness of structured teaching program on vitamin A deficiency among mothers of under five children. He tooks 60 under five mothers for one group pretest- post test research design, the result shows And result shows that in pre test, mean score was 13.81±3.342 whereas post test score was 21.74±2.674. Study concluded that structure teaching program is effective tools to improve the knowledge of mothers of under five children.

In the present study the association of knowledge score of anganwadi workers with selected demographic variables. There is no significant association of knowledge regarding vitamin A deficiency in children between 3-5 yrs of age among anganwadi workers with age in years, residence, education of anganwadi workers and family income.

Demographic variables of the sample:
Distribution of the respondent according to the age revealed that 12 (20%) of them were in the range of 20-29 years, maximum that is 27 (45%) of them were in the range 26year 1 day to 27 years and rest 21 (35%) were in the range of 40 years 1day to 49 years. The tabulated 'F' values was 3.15(df=2,59) which is less than the calculated 'F' i.e. 7.20 at 5% level of significance. Also the calculated 'p'=0.002 which was less than the acceptable level of significance i.e. 'p'=0..

7. Conclusion
In this study from detail analysis it shows that of post test mean score is 18.91 and pre test mean score is 10.39. The hypothesis is tested statistically with distribution of pre test and post test mean, standard deviation and mean difference. There were no significant associations between knowledge score with age, residential area, education and, family income of anganwadi workers respectively.

8. Recommendations
Recommendations for further study based on the findings of the study the following recommendations could be made-
• To assess the effectiveness of self instructional module on vitamin A deficiency in children between 3-5 yrs of age children among anganwadi workers.
• Comparative study can be conducted in urban and rural areas.
• A study to assess the knowledge regarding vitamin A deficiency in children between 3-5 yrs of age children among under five mothers.
• To assess knowledge and attitude regarding vitamin A deficiency in children between 3-5 yrs of age children among anganwadi workers.

9. References
[1]   John DA, Brundha MP (2016) Awareness of Vitamin A Deficiency among Middle Aged Men-Research. Vitam Miner 5: 144.
[2]   Park k. Preventive and Social Medicine,21edition,Bhanot publishers, page no. 350
[3]   Davidson, principles and practices of medicine, 18th edition , page no. 1110 - 1114
[4]   Harrison, principle and practice of medicine, 7th edition, page no. 1500 - 1530
[5]   "Vitamin A Deficiency and Supplementation UNICEF Data". Retrieved 2015-04-07.