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B.sc (N) IV Year, Saveetha College of Nursing, SIMATS, Thandalam, Chennai, Tamil Nadu, India A study to assess the effectiveness of structured teaching programme on prevention and management of vitamin-a prophylaxis among mothers of under five children in selected urban primary health centre, Koyambedu

# Sathiyabama G, Kiruba J and Shiny HS

## **Abstract**

Nutrition is recognized as an important determinant of health and development of societies. It is estimated that each year 55% of deaths 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, zinc) are recognized to affect younger children. A quantitative experimental research was conducted among 60 antenatal mothers. A purposive sampling techniques was used to select the sample. Self administered structured questionnaires were used to collect the demographic data. calculated paired t test value of t=23.043was found to be statistically highly significant at p < 0.001 level.

**Keywords:** Antenatal mothers, yoga, pregnancy, vitamin A, under five children

# Introduction

Vitamin A deficiency in the under 9-12yrs can be prevented easily by increasing consumption of carotene rich foods, breast feeding, proper immunization and reducing results conditions like PEM, respiratory tract infections, diarrhea, and measles at community level (Bhaskarini, 2018).

The Indian government launched at the first vitamin 'A' supplementation programme in 1970to prevent and control blindness resulting from vitamin 'A' prophylaxis programme. All children in the age of one to five years were to be administered 2 lakh IU of vitamin A orally once in 6 months. Under the revised regimen a dose of 1 lakh of vitamin 'A' is to be given of all infants at 9 months along with measles vaccine and a second dose of 2 lakh IU is to be administered at 18 months of age along booster dose of DPT and OPV. Subsequently the children are to receive 3 doses of 2 lakh IU of vitamin 'A' every 6 months until 36 months of age

Vitamin A have committed it to eradicating childhood blindness due to vitamin-'A' deficiency on the planet by the year 2020. Operation 2020 was launched in 2007 and will cover 18 countries. The program gives children two high dose. Vitamin A and anti-parasitic supplements (twice a year for four years), which provides children with enough of the nutrient during their most vulnerable years in order to prevent them from going blind and suffering from other life threatening diseases caused by vitamin A deficiency

During clinical post in a governmental Hospital, Nizamabad, the investigator observed that 10-20 children per month were admitted with malnutrition in the Peadiatric Department. Among them 50% of the cases were associated with vitamin 'A' Deficiency disorders.

Hence the investigator felt the need to conduct as a study on vitamin 'A' Deficiency among mothers of Under Five Children in selected Urban Primary Health Centre, Koyambedu Domellof and Hernell (2016) cognitive and motor functions have shown in young children with Iron Deficiency Anaemia. These differences have remained when controlling for social background factors, even through the possibility of confounding environment factors or nutritional deficiencies Hass and Brownlie (2017) suggested in their study that prevalence of

Corresponding Author: Sathiyabama G Assistant Professor, Saveetha College of Nursing, SIMATS, Chennai, Tamil Nadu, India Iron Deficiency Anaemia is alarming worldwide and its public health significance can't be judged soley on its prevalence.

#### **Methods and Materials**

The study is conducted after getting the formal permission from the Medical officer, Urban primary health centre, koyambedu. The data collection period was 1 week from (24.12.19 to 26.12.19). A total of 60 subjects were selected through purposive sampling techinique) who fulfilled the inclusion criteria and explained the purpose of the study and got written consent from all subjects who took part in the study and the subjects were reassured regarding the confidentiality of their scoreOn the second day pre test was conducted for 1 group by using structured knowledge questionnaire regarding prevention and management pf vitamin A prophalyxisduring pregnancy. Each mother was allowed to answer the entire set of questionnaire for 60 min...In order to conduct the study permission was obtained from the medical officer urban primary health centre, koyambedu. The period of data collection was done in the month of December 20th. Before conducting the data collection procedure, the investigators explained the mothers of under five children regarding the objectives of the study.

# **Result and Discussion**

In the pretest, all 60(100%) had inadequate knowledge on

prevention and management of Vitamin A prophylaxis. Whereas in the post test, 37(61.66%) had adequate knowledge, 22(36.67%) had moderately adequate knowledge and 1(1.67%) had inadequate knowledge on prevention and management of Vitamin A prophylaxis among mothers of underfive children.

The pretest mean score of knowledge was 4.95 with standard deviation 1.43 and the post test mean score of knowledge was 13.05 with standard deviation 2.17. The calculated paired 't' test value of t = 23.043 was found to be statistically highly significant at p < 0.001 level. This clearly infers that there was significant improvement was observed in the post test level of knowledge on prevention and management of Vitamin A prophylaxis among mothers of underfive children.

Demographic variable age had shown statistically significant association with post test level of knowledge on prevention and management of Vitamin A prophylaxis among mothers of underfive children at p< 0.05 level and the other demographic variables had not shown statistically significant association with post test level of knowledge on prevention and management of Vitamin A prophylaxis among mothers of underfive children.

**Section B:** Assessment of Level of Knowledge on Prevention and Management of Vitamin A Prophylaxis Among Mothers of Underfive Children.

**Table 2:** Frequency and percentage distribution of level of knowledge on prevention and management of Vitamin A Prophylaxis among mothers of underfive children.

N = 60

Knowledge	Inadequate Knowledge (≤50%)		Moderately Adequate Knowledge (51 – 75%)		Adequate Knowledge (>75%)	
	No.	%	No.	%	No.	%
Pretest	60	100.0	0	0	0	0
Post Test	1	1.67	22	36.67	37	61.66

The above table 2 shows that in the pretest, all 60(100%) had inadequate knowledge on prevention and management of Vitamin A prophylaxis.

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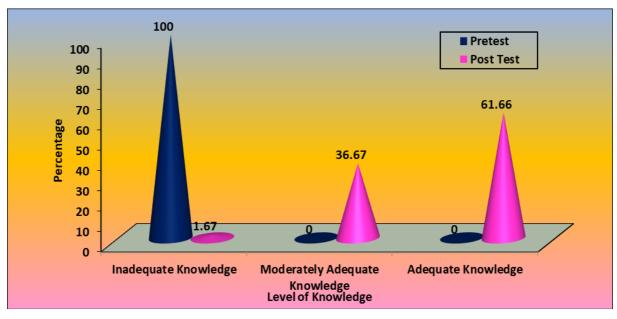


Fig 1: Percentage distribution of level of knowledge on prevention and management of Vitamin A Prophylaxis among mothers of underfive children

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# **Author scontribution**

All the authors actively participated in the work of the. study all authors read and approved the final manuscript.

# **Conflicts OF Interest**

The author declares no conflicts of intersest.

## Reference

- Abraham K, Mueller C, Grueters A et al. Minimal inflammation, acute phase response and avoidance of misclassification of vitamin A and iron status in infants importance of a high-sensitivity C-reactive protein (CRP) assay. Int J Vitam Nutr Res 2003;73:423-30
- 2. ACC/SCN Consultative Group: 1994;Controlling vitamin A deficiency. ACC/SCN State-of-the-art Series, Nutrition Policy Discussion Paper no 14 United Nations, Geneva, ACC/SCN: Third Report on the World Nutrition Situation, 1997.
- 3. Adelekan-Delana A, Northrop-Clewes CA, Owa JA, *et al.* Use of biomarkers of sub-clinical infection, nutrition and neonatal maturity to interpret plasma retinol in Nigerian neonates. Br J Nutr. 2003;90:353-61
- 4. Aguayo VM, Baker SK, Crespin X, *et al.* Maintaining high vitamin A supplementation coverage in children: lessons from Niger. Food Nutr Bull 2005;26:26-31.
- 5. Aguayo VM, Kahn S, Ismael C. Vitamin A deficiency and child mortality in Mozambique. Publ Health Nutr. 2005: 8:29-31
- 6. Ahmed F, Hasan N, Kabir Y. Vitamin A deficiency among adolescent female garment factory workers in Bangladesh. Eur J Clin Nutr. 1997;51:698-702
- 7. Ahmed F, Ellis J, Murphy J, *et al.* Excessive faecal loss of vitamin A (retinol) in cystic fibrosis. Arch Dis Child. 1990;65:589-93
- 8. 8.Ahmed F, Khan MR, Akhtauzzaman M, *et al.* 2005;Efficacy of twice-weekly multiple micronutrient supplementation for improving the haemoglobin and micronutrient status of anaemic adolescent schoolgirls in Bangladesh. Am J Clin Nutr 82:829-35
- Ahmed F, Khan MR, Jackson AA. Concomitant supplemental vitamin A enhances the response to weekly supplementation of iron and folic acid in anemic teenagers in urban Bangladesh. Am J Clin Nutr 2001;74:105-15
- 10. Akhter N, Stallkamp G, de Pee S, *et al.* Vitamin A capsule distribution among infants in rural Bangladesh aged 6-11 months. Sight and Life Newsletter. 2004;3:26-8
- 11. Aktuna D, Buchinger W, Langsteger W, *et al.* β-carotene, vitamin A and carrier proteins in thyroid diseases. Acta Med Austriaca. 1993;20:17-20
- 12. Alacorn K, Kolsteren PW, Prada AM, *et al.* Effects of separate delivery of zinc or zinc and vitamin A on hemoglobin response, growth, and diarrhea in young Peruvian children receiving iron therapy for anemia. Am J Clin Nutr. 2004;80:1276-82.
- 13. Albert MJ, Qadri F, Wahed MA, *et al.* Supplementation with zinc, but not with vitamin A improves

- seroconversion to vibriocidal antibody in children given an oral cholera vaccine. J Infect Dis. 2003;187:909-13
- 14. Alm B, Wennergren G, Norvenius SG *et al.* Vitamin A and sudden infant death syndrome (SIDS) in Scandinavia 1992-1995. Acta Paediatrica. 2003;92:162-4