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Knowledge and Practice Regarding Vitamin-A and its Deficiency among Mothers of under Five Children

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Abstract--- Background of the Study: *Health care of under five children has been markedly changed in developed countries. Vitamin-A deficiency is the second most important factor for global blindness. The under five children has prime importance, as the mortality and morbidity are higher in this group, due to vitamin deficiency disorders. Vitamin A deficiency is one of the most important causes of preventable childhood blindness and is a major contributor to morbidity and mortality from infections. The present study was conducted among mothers of Under five children to assess knowledge and practice regarding vitamin A & its deficiency.*

Material and Methods: *Quantitative research approach with descriptive research design was used. To assess the knowledge regarding Vitamin A and its deficiency structured knowledge questionnaire was used. Through checklist practice regarding Vitamin A and its deficiency was identified.*

Results: *The collected data was tabulated and analyzed by using descriptive and inferential statistics. The results shows that among majority of the samples (90%) were having poor, (8.71%) were having average and (1.28 %) were having good knowledge score. Majority of the samples (83%) have demonstrated poor practice and 17% have demonstrated good practice regarding Vitamin A and its deficiency.*

Conclusions: *Significant low levels of knowledge and poor practice regarding vitamin A and its deficiency was found. Knowledge of food based vitamin A can make sustained improvements in knowledge and dietary practices. Hence, health care providers should be trained and encouraged to provide a more personalized health education to the mothers of Under Five Children to bring awareness regarding vitamin A and its deficiency.*

Keywords--- *Vitamin A, Vitamin A Deficiency, Under Five Children.*

I. INTRODUCTION

"Every three seconds in developing world, a child dies needlessly due to lack of basic health care and other things we all take for granted."

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More than 254 million children suffer from vitamin deficiency worldwide in each year, 20-40 million children suffer from mild vitamin-A deficiency and three million children from severe deficiency. World health organization estimates that 100 to 140 million children under the age of five may be living with dangerously low vitamin-stores. More than four million children are worldwide exhibit sign of severe deficiency.[1]

Vitamin-A deficiency is seen more commonly in under five children. Vitamin-A deficiency is a systemic disease with major effects on eye It causes xeropthalmia which is characterized by series of clinical signs. These include- Night blindness, Conjuctival xerosis, Bitot-spot, Corneal ulceration, Karatomalacia and Corneal scar. Dietary deficiency of vitamin-A most commonly and importantly affects the eyes, and it can lead to blindness. This deficiency is usually associated with malnutrition, chronic diarrhoea, malabsorption syndrome, and prematurity [2]

Nutrition is recognized as an important determinant of health and development of societies. It is estimated that each year 55% of deaths among under five children can be directly or indirectly attributed to hunger and malnutrition in developing countries including India. 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. Vitamin-A deficiency is a major nutritional problem among under five children in developing and under developed countries . Public and community health sectors launched a number of Vitamin-A prophylaxis programmes to prevent Vitamin-A deficiency diseases. [3].

Vitamin A deficiency in the under Five Children can be prevented by increasing consumption of carotene rich foods, breast feeding, proper immunization and reducing results conditions like PEM, respiratory tract infections, diarrhoea and measles at community level [4]

II. MATERIAL AND METHODS

Community based cross-sectional study was done over a period of 2 months in selected rural areas of Vadodara, Gujarat, India. Approval of Institutional Ethics Committee was obtained prior to the conduction of the study. Study subject were Mothers of Under Five Children. The sample size was 390 which was calculated to estimate 95% confidence interval with α error of 0.05 and finite correction (absolute error of margin) determined by using 'Raosoft' Software of sample size calculation. A total of 390 Mothers of under Five Children were selected by using non probability convenient sampling technique. Pilot-tested questionnaire measuring the knowledge and self-reported checklist for evaluating practice was administered to each study participant. The subjects were explained about the need of the study and informed consent was taken. Privacy and confidentiality of collected information were ensured throughout the process. Data were analyzed by using descriptive and inferential Statistics.

III. RESULTS

The majority of study participants (49%) were belongs to 24-30 years of age, 31% have got Primary Education, 51% were Housewife, 57% were multi para, 87% were having no previous knowledge regarding vitamin A & its deficiency, 78% were using public source for immunization, 51% were having non vegetarian diet.

Figure 1 shows that majority of the respondents (90%) were having poor knowledge, 8.71% had an average and only few (1.28%) had good knowledge.

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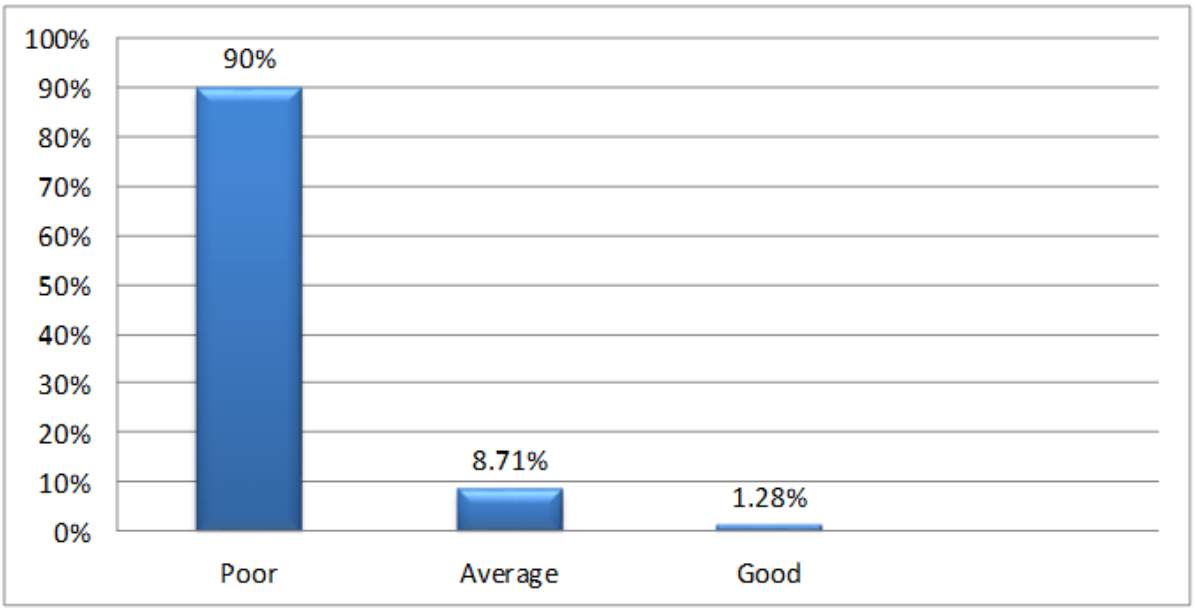

Figure 1: Distribution of Respondents According to the Knowledge Level

Figure 2 depicts that 83% of the mothers were having poor practice regarding Vitamin-A & its deficiency.

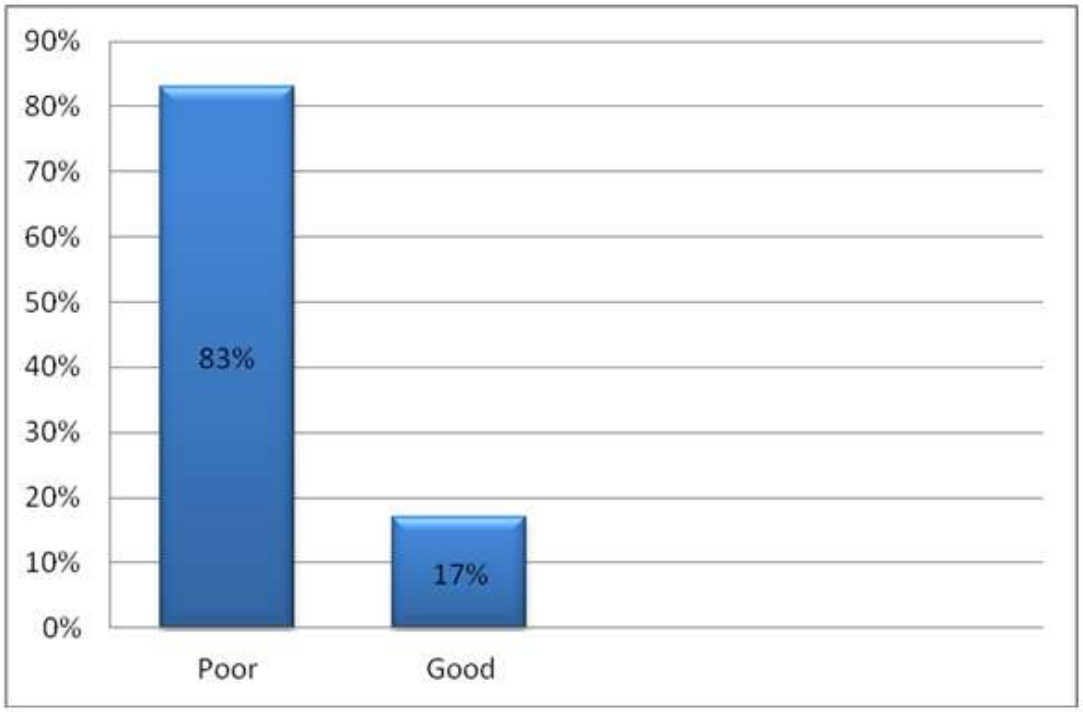

Figure 2: Distribution of Respondents According to Practice Standards

Knowledge of mothers about vitamin A & its deficiency was significantly high in Mothers who were more educated and had previous knowledge regarding Vitamin A & its deficiency as compare to Mothers who were less educated and no previous knowledge regarding Vitamin A & its deficiency.

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Table 1: Association between Knowledge Score and Demographic Variables

Sr. No.	*Variable*		*Knowledge*			*Chi square value*	*Inference at 0.05 level*
			Poor	**Average**	**Good**		
1	Education	Illiterate	10	0	0	16.92	**S**
		Primary	106	14	0		
		Secondary	100	10	0		
		Higher secondary	84	5	1		
		Graduation and above	51	5	4		
2	Previous education regarding Vitamin A & its deficiency	Yes	25	20	5	7.23	**S**
		No	326	14	0		

Multipara mothers were having good practice standard in regards to Vitamin A & its deficiency as compared to primipara Mothers.

Table 2: Association between Practice Score and Demographic Variables

Sr. No.	*Variable*		*Practice*		*Chi square value*	*Inference at 0.05 level*
			Poor	*Good*		
1	Parity	Primi Para	149	21	4.038	**S**
		Multi Para	176	44		

Study result showed there is a moderate positive correlation between Knowledge and practice standards of Mothers of Under Five regarding Vitamin A & its deficiency as karl Pearson's coefficient correlation was 0.45 illustrates that as the knowledge increase there is a positive change in practice standards.

IV. DISCUSSION

Analysis of the demographic characteristics of the samples participated in this study showed that majority of the samples' characteristics were similar to other studies.[5] The prominent finding in our study shows that Knowledge & Practice about vitamin A & its deficiency among mothers was low; consistent with baseline and control findings from intervention studies conducted by Ankit M Sheth[6]andR Khalique et al[7].

The results of the present study revealed a significant association between the Mothers' education, Mothers' Previous knowledge of Vitamin A found with knowledge score. Which was in agreement with other studies that explained that, the more educated and aware of Vitamin A, and the more knowledge regarding vitamin A and its deficiency[8, 9, 10].The practice was significantly associated with the parity of the mother which was in contrast with the findings of study conducted by Ankit M Sheth[6] .

This study undertaken to assess knowledge and practice regarding vitamin A & its deficiency among mothers of under five children. The findings of the study revealed that the overall knowledge level regarding Vitamin A & its deficiency among the Mothers were relatively low. Addressing this issue is important to increase the overall awareness about vitamin A deficiency disorders in the community which can lead to early recognition of symptoms and signs, and provision of vitamin A rich foods and vitamin A supplementation for prevention.

V. CONCLUSION

The overall findings of the study revealed that the overall knowledge level regarding Vitamin A & its deficiency

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among the Mothers were relatively poor. More efforts are needed to promote awareness about Vitamin A supplementation campaigns through the media and population health education programs. More emphasis is recommended to train health manpower to ensure continuous dissemination of information regarding Vitamin A & its deficiency.

Conflict of Interest

The authors declare that there is no conflict of interests regarding the publication of this manuscript.

Source of Funding

Researchers have used own finance to complete research study.

Ethical Clearance

Approval of Institutional Ethics Committee was obtained prior to the conduction of the study. Privacy and confidentiality of collected information were ensured throughout the process.

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