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### RESEARCH ARTICLE

#### “A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING VITAMIN A DEFICIENCY AMONG MOTHERS OF UNDER FIVE CHILDREN IN SELECTED RURAL AREAS AT PUDUCHERRY”

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#### Abstract

**Introduction:** Vitamin A is essential for eye health and the proper functioning of the immune system. It is found in foods such as milk, liver, eggs, red and orange fruits, red palm oil and green leafy vegetables, although the amount of vitamin A readily available to the body from these sources varies widely. Vitamin A deficiency is a major nutritional problems among under five children in developing and under developed countries. Vitamin A deficiency is a systemic disease with major effects on eye this deficiency is usually associated with malnutrition, chronic diarrhea, malabsorption syndrome hepatic insufficiency and prematurity. STATEMENT OF THE PROBLEM: A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING VITAMIN A DEFICIENCY AMONG MOTHERS OF UNDER FIVE CHILDREN IN SELECTED RURAL AREA AT PUDUCHERRY. OBJECTIVES: To assess the level of knowledge regarding vitamin A deficiency among mothers of under five children. To associate the level of knowledge regarding vitamin A deficiency among mothers of under five children with their selected demographic variables.

**Methodology:** A quantitative research design was used for this study in group of selected mothers of under five children in rural area at Puducherry. A cross sectional descriptive survey was used. A total number of 50 samples were selected by the convenient sampling technique. The data was collected using a unstructured questionnaires.

**The Major Findings Of The Study:** The findings reveals that out of 50 mothers of under five children the knowledge regarding vitamin A deficiency 36(72%) more than half of them had inadequate knowledge, 8(16%) of them had moderate knowledge and 6(12%) of them had adequate knowledge. The chi square test revealed that is no statistically significant association between the selected demographic variables such as Age of the mother, age of the baby, sex of the baby, religion, type of family, source of information, socio economic status, occupation of the mother and information regarding vitamin A deficiency with the level of  $p < 0.05$ .

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**Conclusion:** From this study it was concluded that the knowledge of the mother of under five children regarding vitamin A deficiency shows that most of the mothers have inadequate knowledge. 36(72%) more than half of them had inadequate knowledge, 8(16%) of them had moderate knowledge and 6(12%) of them had adequate knowledge. So the community health personal should motivate the mothers of under five children in educating about vitamin A deficiency and its prevention.

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### **Introduction:-**

**'Children are the most valuable asset for any society they are the builders of the future of any nation, Children health-Tomorrow's wealth.'**

- (Jawaharlal Nehru)

Health care of under five children has been markedly changed in developed countries. There is a change in the view of children from, "Miniature adults" to "Unique individual" with special needs and qualities, the under five children has prime importance, as the mortality and morbidity are higher in this group, due to vitamin deficiency disorders. Under five children focus on important segment of the Indian population. They contribute to the vital human potential and impart strength to the national economy and development.

The word "vitamin" means life. Vitamins are substances essential for the maintenance of normal metabolic functions they are required for the metabolism of carbohydrates, fats and proteins. Vitamins are widely used as dietary supplements. Even though vitamin supplements are of no demonstrated value for healthy infants, child adolescents or adults who is consuming an adequate and varied diet.

Vitamin A is essential for eye health and the proper functioning of the immune system. It is found in foods such as milk, liver, eggs, red and orange fruits, red palm oil and green leafy vegetables, although the amount of vitamin A readily available to the body from these sources varies widely.

### **Review of Literature:-**

**Divyashettigar et.al (2013)** conducted a study on assessment of knowledge of mothers of underfive children on nutritional problems; a rural community based study. A cross sectional study among 50 under five mothers. The study results shows that of the mothers surveyed, Knowledge about underfive nutritional problems and its prevention was reported to be nearly half of the mothers 27 (54%) had poor knowledge, around 19 (38%) had average knowledge, and only 4 (8%) had good knowledge regarding the common nutritional problems and its prevention. The study concluded that a significant number of mothers were unaware of the prevention and management of underfive nutritional problems.

### **Statement of The Problem:**

"A descriptive study to assess the knowledge regarding vitamin a deficiency among mothers of under-five children in selected rural areas at Puducherry".

### **Objectives:-**

1. To assess the level of knowledge regarding vitamin A deficiency among mothers of under five children.
2. To associate the level of knowledge regarding vitamin A deficiency among mothers of under five children with selected demographic variables.

### **Assumption:**

1. The mothers may have inadequate knowledge regarding prevention of vitamin A deficiency diseases.
2. The adequate knowledge and healthy practices of mothers regarding prevention of vitamin A deficiency diseases may lead to good vision.
3. The selected variables have influence on mothers knowledge and practices regarding prevention of vitamin A deficiency diseases.

**Methodology:-**

A quantitative research design was used for this study in group of selected mothers of under five children in rural area at Puducherry. A cross sectional descriptive survey was used. A total number of 50 samples were selected by the convenient sampling technique. The data was collected using a unstructured questionnaires.

**Section A:**

Demographic variables: Age of the mother, age of the baby, sex of the baby, religion, type of family, source of information, social economic status, occupation of the mother.

**Section B:**

Knowledge items regarding vitamin A deficiency: It consists of knowledge items of 12 questions with four options. Each question has one correct answer and three wrong options. Each correct answer will be given 1 mark and wrong answer 0 mark.

**Score Interpretation:**

SCORE	INTERPRETATION
Below 33%	Inadequate knowledge
34-79%	Moderate adequate knowledge
Above 80%	Adequate knowledge

**Research Approach:**

A quantitative approach was used for this study.

**Research Design:**

The research design adopted for this study was descriptive survey.

**Setting:**

The study was conducted at thirubhuvanai area.

**Population:**

The population for this study includes all mothers of under five children.

**Sample:**

A sample for the present study consists mothers of under five children residing in thirubhuvani area.

**Sample Size:**

Study sample consists of 50 mothers of under five children.

**Sample Technique:**

A Convenient sample technique was used for collecting the sample.

**Criteria For Sample Selection:****Inclusion Criteria**

1. Mothers of under five children.
2. Mothers who are willing to participate in the study.
3. Mothers who are able to understand in Tamil or English.

**Exclusion Criteria:**

1. Mothers with children above 5 years of age.
2. Mothers with under five children who are critically ill.
3. Mothers who are suffering from any chronic or acute disorders.

**Results:-**

The findings reveals that out of 50 mothers of under five children the knowledge regarding vitamin A deficiency 36(72%) more than half of them had inadequate knowledge, 8(16%) of them had moderate knowledge and 6(12%) of them had adequate knowledge.

The chi square test revealed that is no statistically significant association between the selected demographic variables such as Age of the mother, age of the baby, sex of the baby, religion, type of family, source of information, socio economic status, occupation of the mother and information regarding vitamin A deficiency with the level of  $p < 0.05$ .

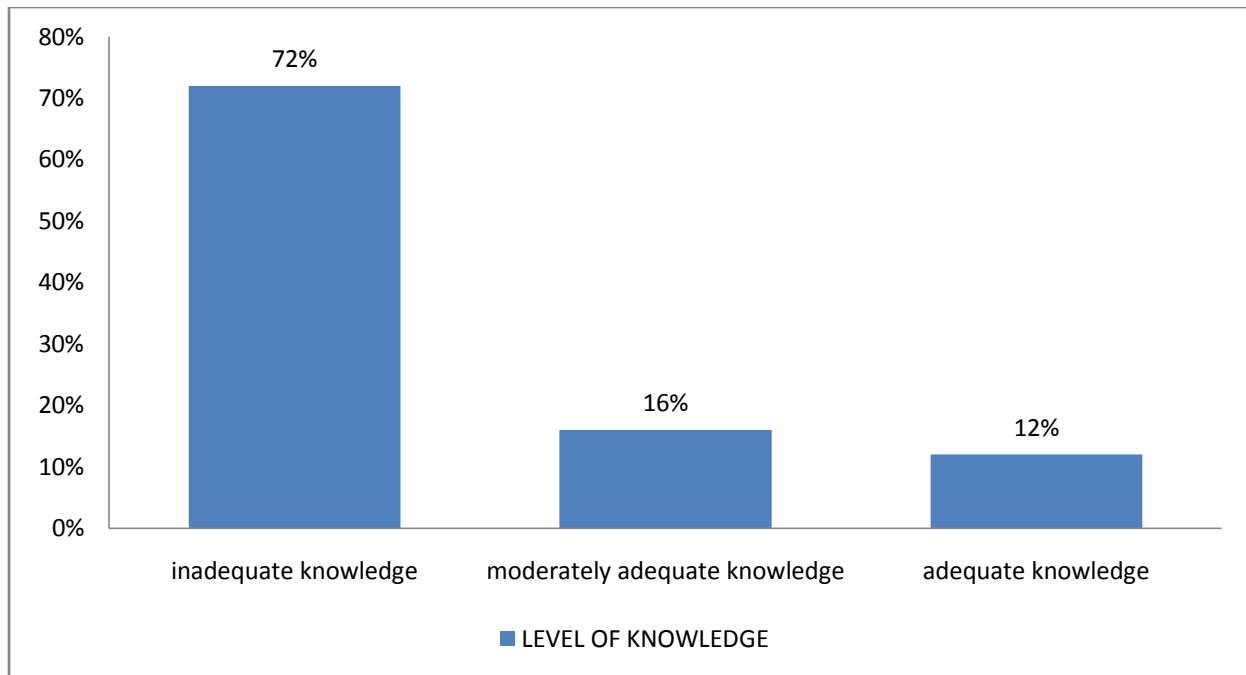
**Frequency and percentage distribution to assess the knowledge regarding vitamin A deficiency among mothers of under five children according to their selected demographic variables. (N=50)**

S.NO	DEMOGRAPHIC VARIABLES	FREQUENCY (N)	PERCENTAGE (%)
1	Age in year of the mother: (years)		
	20-25	33	66%
	26-30	17	44%
	31-35	0	0%
	36-40	0	0%
2	Age of the baby or child:		
	below 1 years	20	40%
	1-2 years	12	24%
	3-4 years	10	20%
	above 4 years	8	16%
3	Sex of the baby:		
	male	24	48%
	female	26	52%
4	Religion :		
	hindu	44	88%
	muslim	6	12%
	Christian	0	0%
	Others	0	0%
5	Type of family:		
	Nucler	35	70%
	Joint	14	28%
	Extended	1	2%
6	Source of information:		
	mass media	21	42%
	friends	5	10%
	health professionals	19	38%
	no information	5	10%
7	Socio economic status:		
	5000	21	42%
	5001-1000	19	38%
	10001-15000	9	18%
	Above 15001	1	2%
8	Occupation of the mother:		
	Unemployed	29	58%
	Government job	6	12%
	private job	4	8%
	agriculture	11	22%

**Frequency, percentage, distribution of sampling according to level of knowledge about vitamin A deficiency.**

LEVEL OF KNOWLEDGE	NUMBER OF SAMPLE	PERCENTAGE
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Inadequate knowledge	36	72%
Moderately adequate knowledge	8	16%
Adequate knowledge	6	12%



Association of selected demographic variables with the level of knowledge regarding vitamin A deficiency.

**Table 3:-** The chi-square test revealed that there is no statistically significant association between selected demographic variables such as Age of the mother, age of the baby, sex of the baby, religion, type of family, source of information, socio economic status, and occupation of the mother.

S.NO	DEMOGRAPHIC VARIABLES		INADEQUATE		MODERATE		ADEQUATE		CHI SQUARE	P VALUE
			F	%	F	%	F	%		
1	Age in year of the mother (years)	20-25	12	24%	11	22%	7	14%	1.40	0.037
		26-30	8	16%	9	18%	3	6%		
		31-35	0	0%	0	0%	0	0%		
		36-40	0	0%	0	0%	0	0%		
2	Age of the baby or child	below 1 years	7	14%	8	16%	5	10%	3.243	0.227
		1-2 years	4	8%	3	6%	5	10%		
		3-4 years	3	6%	3	6%	4	8%		
		above 4 years	2	4%	3	6%	3	6%		
3	Sex of the baby	male	13	26%	7	14%	4	8%	0.625	0.429
		female	12	24%	8	16%	6	12%		
4	Religion	hindu	32	64%	8	16%	4	8%	3.115	0.3872
		muslim	2	4%	3	6%	1	2%		
		christian	0	0%	0	0%	0	0%		
		others	0	0%	0	0%	0	0%		
5	Type of family	nucler	12	24%	13	26%	10	20%	2.92	0.356
		joint	7	14%	5	10%	2	4%		
		extended	1	2%	0	0%	0	0%		

6	Source of information	mass media	7	14%	9	18%	5	10%	3.84	0.385
		friends	3	6%	2	4%	0	0%		
		health professionals	9	18%	7	14%	3	6%		
		no information	3	6%	2	4%	0	0%		
7	Socio economic status	5000	7	14%	7	14%	7	14%	1.27	7.82
		5001-1000	9	18%	5	10%	5	10%		
		10001-15000	3	6%	4	8%	2	4%		
		Above 15001	1	2%	0	0%	0	0%		
8	Occupation of the mother	Unemployed	7	14%	20	40%	2	4%	2.52	5.99
		Government job	2	4%	3	6%	1	2%		
		private job	2	4%	2	4%	0	0%		
		agriculture	3	6%	5	10%	3	6%		

### Conclusion:-

From this study it was concluded that the knowledge of the mother of under five children regarding vitamin A deficiency shows that most of the mothers have inadequate knowledge. 36(72%) more than half of them had inadequate knowledge, 8(16%) of them had moderate knowledge and 6(12%) of them had adequate knowledge. So the community health personal should motivate the mothers of under five children in educating about vitamin A deficiency and its prevention.

### Implications of Nursing Research:

The present study can help nurse enrich their skills and knowledge of vitamin A deficiency. The study may help the nurse to provide effectiveness of vitamin A deficiency among mothers of under five children in selected rural area at puducherry.

### Nursing Education:

The medical surgical and nursing foundation curriculum needs to strengthen to enable the nursing students to know about the vitamin A deficiency. This nursing students need to organize an in service education program to nurses, students and also for the paramedical workers. Student should be provide with adequate opportunity in developing skills in handling such clients and how to identify their difficulties and help them to promote comfort and wellbeing.

### Nursing Services:

Nurses working in the child health nursing and community set up can benefit from such researches, as it will provide more insight regarding the preventive of vitamin A deficiency in under five children. They should know the importance of the preventive aspect with regard to vitamin A deficiencies in under five children.

### Nursing Administration:

1. Nurses administration can make necessary policies to implement the nursing care services for mothers of under five children..
2. Nurse's administration can organize in service education program and adequate staffing in community area to improve knowledge of mothers.
3. Nurse's administrators should give attention on proper selection, placement and effective utilization of the nurses in all area with their ability in education of care of mothers of under-five.

### Nursing Research:

1. The findings of the study help the community health nurse and students to develop the inquiry by providing baseline. The general aspect of the study result can be made by further replication of the study.
2. A nurse researcher can provide supportive care measures which may improve the physical wellbeing for mothers of under-five.

### Recommendation:-

Based on findings of the present study, the following recommendations have been made

1. Similar study can be conducted in other parts of the country with a large sample.

2. The same study can be conducted in different settings.
3. The same study can be conducted with true experimental design.

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