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A Descriptive Study to Assess the Knowledge Regarding Vitamin a Deficiency Disorders among Mothers of Under Five Children in Selected Area of Waghodia.

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ABSTRACT:
Introduction: Vitamin-A Deficiency is a significant public health problem in over 75 countries. The Children of developing Countries suffer most from this condition, which is largely preventable. It is estimated that up to 230 million Children are at risk of Vitamin-A Deficiency and over one million Vitamins-A Deficiency associated Childhood deaths occur annually. Among Vitamin A is an essential nutrient for the normal functioning of the visual system and maintenance of cell function for growth, epithelial, red blood cell production, immunity, and reproduction. Vitamin A deficiency is one of the important factors for childhood blindness and a major contributing factor to morbidity and mortality among under-five children. It is mostly seen in poorer people and developing countries. About 2, 50,000 to 5,00,000 malnourished children in the developing world go blind each year. Vitamin A deficiency can be combated with a variety of food and medicine-based approaches including increased food diversity, food fortification and medical Vitamin A supplements in every six months.
Methods: In this study, Cross-Sectional Descriptive Research Design were used to assess the knowledge of participants regarding vitamin A deficiency disorder among mothers of under five children. Simple Random sampling technique was used to collect the data. 60 sample were taken from the Waghodia village of Vadodara. A knowledge-based questionnaire was used to assess the level of knowledge regarding vitamin A deficiency disorder among mothers of under five children. Written informed consent was obtained from the study samples before data collection.
Results: Most mothers have completed primary education (45%), followed by secondary education (31.7%) and graduate education (21.7%). A small percentage is illiterate (1.7%). most mothers are housewives (86.7%), while a smaller percentage is engaged in labour work (5%), business (5%), or government jobs (3.3%). A significant portion of mothers have an income above 10,000 Rupees (63.3%). most families are joint families (63.3%), followed by nuclear families (35%), and a small percentage belong to extended families (1.7%). the distribution of dietary habits shows that 53.3% of mothers follow a mixed diet, while 46.7% follow a vegetarian diet, while 46.7% follow a vegetarian diet. most families have one under-five child (63.3%), followed by two children (31.7%), and a small percentage have three children

(5%). most participants have taken the vitamin immunization (95%), while a small percentage have not taken it (5%). social workers are the primary source of information (76.7%), followed by family (13.3%), mass media (6.7%), and friends (3.3%). Overall, the data provides insight into the demographic characteristics of mothers in the sample, including their age, education, occupation, family structure, income, and sources of information. The data presented the knowledge levels of 60 mothers, 32 participants (53.3%)fall into the category of Poor Knowledge Score,35% have an Average Knowledge Score, 11.7% demonstrate a Good Knowledge Score

Keywords: Vitamin A, Vitamin A deficiency Disorders, Under 5 children

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INTRODUCTION:

Vitamin-A deficiency is a major nutritional problem among under five children in developing and under developed countries. Public and community health sectors launched several Vitamin-A prophylaxis programmes to prevent Vitamin-A deficiency diseases. Vitamin-A deficiency is a systemic disease with major effects on eye. Vitamin-A Deficiency occurs where diets contain insufficient vitamin A for meeting the needs associated with growth and development, physiological functions, and periods of added stress due to illness. The first five years of life are critical for child development and it entails the biological, psychological, and emotional changes occur. During the development stage they require adequate nutrients which influencing the growth and immunity. If they are not fulfilled with adequate requirement they suffer from certain deficiency disorder.

Vitamin-A Deficiency is a significant public health problem in over 75 countries. The Children of developing Countries suffer most from this condition, which is largely preventable. It is estimated that up to 230 million Children are at risk of Vitamin-A Deficiency and over one million Vitamins-A Deficiency associated Childhood deaths occur annually. Among Vitamin A is an essential nutrient for the normal functioning of the visual system and maintenance of cell function for growth, epithelial, red blood cell production, immunity, and reproduction. Vitamin A deficiency is one of the important factors for childhood blindness and a major contributing factor to morbidity and mortality among under-five children. It is mostly seen in poorer people and developing countries. About 2,50,000 to 5,00,000 malnourished children in the developing world go blind each year.

MATERIAL AND METHODOLOGY:

The quantitative research approach in this study aimed to assess the knowledge regarding vitamin A deficiency disorders among mothers of under five children. Researcher used cross sectional descriptive research design. Keeping in mind the availability of the time and resources and samples size the data was collected from Waghodia. A structure knowledge questionnaire was selected as appropriate method of data collection. Conducting the Research involved selecting 60 under five children's mothers. Investigator use simple random sampling technique.

The study incorporated three main sections of the questionnaire

- Section A: Demographic tools
- Section B: questionnaire

Prior to the data collection, permission was obtained from the relevant authorities, and a schedule outlining of the research activities was submitted to the research guide to ensure the proper oversight. The tools used were subjected to the consent validity through the experts' evaluations, and reliability was established with a satisfactory test p value of less than 0.05. Analysis of the collected data involved utilizing the statistical measures such as frequency, percentage, standard deviation, chi square to glean the insights of the relationship between the variable

RESULT:

Table:1 Description of Demographic Variables

Sr.No	Demographic Variables	Category	Frequency	Percentage
1	**Age group of the mother**	Below20years	00	00
		20-25 years	35	58.3
		26-30 years	17	28.3
		Upto 30 years	8	13.3
2	**Mother education status**	Illiterate	1	1.7
		Primary	27	45
		Secondary	19	31.7
		Graduate	13	21.7
3	**Occupation of the mother**	Housewife	52	86.7
		Labour work	3	5
		Business	3	5
		Government Job	2	3.3
4	**Income of the mother**	3001-5000 Rupees	4	6.7
		5001-7000 Rupees	4	6.7
		7001-9000 Rupees	14	23.3
		Above 10,000 Rupees	38	63.3
5	**Type of the family**	Nuclear	21	35
		Joint	38	63.3

		Extended	1	1.7
6	**Dietary habits of the mother**	Veg diet	28	46.7
		Mixed diet	32	53.3
7	**What is the number of under five children in your family?**	1	38	63.3
		2	19	31.7
		3	3	5
		4	00	00
8	**Immunization of vitamin**	Vaccine taken	57	95
		Not taken	3	5
9	**Source of information**	Mass media	4	6.7
		Family	8	13.3
		Friends	2	3.3
		Social worker	46	76.7
10	**Religion**	Hindu	46	76.7
		Muslim	14	23.3
		Christian	00	00
		Sikh	00	00

TABLE :2 Table 2: Frequency and percentage distribution Knowledge Score

Sr.No	Knowledge Score	Frequency(f)	Percentage (%)
1	**Poor**	32	53.3
2	**Average**	21	35
3	**Good**	7	11.7

Table 2 presents the frequency and percentage distribution of knowledge scores among the study participants. The knowledge scores are categorized into three levels: Poor, Average, and Good.

1. **Poor Knowledge Score:**

- The table indicates that 32 participants (53.3%) fall into the category of Poor Knowledge Score. This suggests that a significant proportion of the study population has a lower level of knowledge on the subject matter.

2. **Average Knowledge Score:**

- Twenty-one participants (35%) have an Average Knowledge Score. This signifies a moderate level of knowledge among this portion of the study population.

3. **Good Knowledge Score:**

- Seven participants (11.7%) demonstrate a Good Knowledge Score. This indicates that a relatively smaller percentage of the study population has a higher level of knowledge on the subject matter.

In summary, the distribution of knowledge scores among the participants suggests a varied level of understanding, with the majority falling into the Poor and Average knowledge categories. The smaller percentage in the Good knowledge category implies that there is room for improvement in the overall knowledge level of the study population.

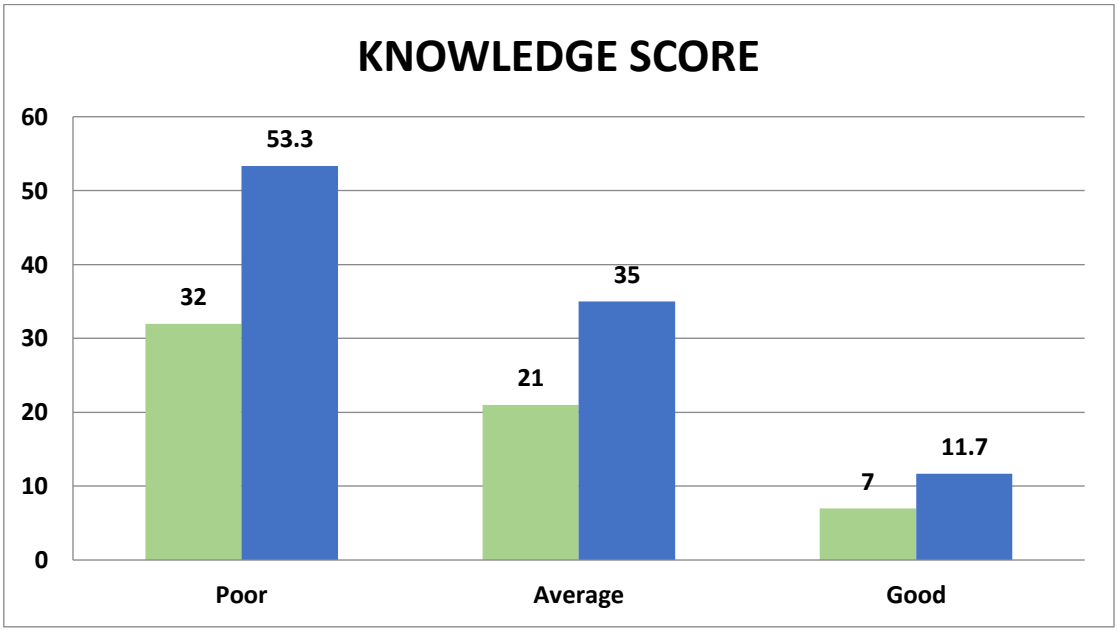

TABLE 3 Association between knowledge score with selected demographic variables

Sr.No	Demographic Variables	Category	Knowledge Score			Chi-square Value	df	p-Value
			Poor	Average	Good			
1	Age group of the mother	Below20years	0	0	0	2.412	4	0.661^{NS}
		20-25 years	18	12	5			
		26-30 years	8	7	2			
		Upto 30 years	6	2	0			
2	Mother education status	Illiterate	1	0	0	2.855	6	0.827^{NS}
		Primary	14	10	3			
		Secondary	12	5	2			
		Graduate	5	6	2			
3	Occupation of the mother	Housewife	28	19	5	4.383	6	0.625^{NS}
		Labour work	1	1	1			
		Business	2	0	1			

		Government Job	1	1	0			
4	**Income of the mother**	3001-5000 Rupees	3	0	1	11.602	6	0.071 NS
		5001-7000 Rupees	2	0	2			
		7001-9000 Rupees	9	5	0			
		Above 10,000 Rupees	18	16	4			
5	**Type of the family**	Nuclear	7	10	4	5.935	4	0.204 NS
		Joint	24	11	3			
		Extended	1	0	0			
6	**Dietary habits of the mother**	Veg diet	15	12	1	3.876	2	0.144 NS
		Mixed diet	17	9	6			
7	**What is the number of under five children in your family?**	1	18	16	4	2.973	4	0.562 NS
		2	12	4	3			
		3	2	1	0			
		4	0	0	0			
8	**Immunization of vitamin**	Vaccine taken	30	21	6	2.481	2	0.289 NS
		Not taken	2	0	1			
9	**Source of information**	Mass media	4	0	0	13.672	6	0.034*
		Family	3	2	3			
		Friends	0	1	1			
		Social worker	25	18	3			
10	**Religion**	Hindu	24	18	4	2.502`	2	0.286 NS
		Muslim	8	3	3			
		Christian	0	0	0			
		Sikh	0	0	0			

CONCLUSION:

Based on the study findings, it concludes that there is a poor knowledge among mothers of under 5 children regarding vitamin A deficiency disorders. The majority of mothers have poor understanding of these disorders, with only a small fraction demonstrating average knowledge. This gap in knowledge poses significant risks to child health and well-being, as vitamin A deficiency can have serious consequences for childhood development and immune function.

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CONFLICT OF INTEREST:

No author has conflict of interest.

AUTHOR'S CONTRIBUTION:

Author 1- Approval and finalization of the study's conception and design, as well a manuscript

drafting.

Author 2- Collection and analysis of data, as well as interpretation of results

ETHICS APPROVAL: Permission taken from Parul University Institutional Ethics Committee for Human Research PU-IECHR

Approval Number: PUIECHR/PIMSR/00/081734/5909

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