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"Knowledge Regarding Nutritional Diet in Prevention of Malnutrition among Adolescent's Girls in Selected Higher Secondary School of Waghodia Taluka" Vadodara, Gujarat

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Abstract

Background of the Study: Malnutrition has become an urgent global health issue in all agegroup as especially in adolescents. Globally adolescents constitute one-fifth of the total global population in which adolescent girls have devastating effects of malnutrition on them due to lack of knowledge. Malnutrition among adolescent girls is a significant public health concern with far-reaching consequences. Addressing this issue requires a comprehensive approach that includes improving access to nutritious food, enhancing healthcare services, promoting nutritional education, and addressing socioeconomic and cultural barriers. By emphasing on the unique needs and challenges faced by adolescent girls, we can improve their health outcomes and support their development into healthy, productive adults.

Objectives of the Study: Firstly, to assess the knowledge regarding nutritional diet in prevention of malnutrition among adolescents girls and to find association between knowledge score with selected demographic variables.

Method: The Descriptive study was carried out with a sample size of 60 adolescent's girls studding in High schools of Waghodia Taluka. A Convenience Sampling Technique was carried out to obtained desired candidates. A self -structure questionnaire was made to get data that would help in assessing knowledge level as well as association between knowledge score with selected demographic variable for adolescent's girls. Chi- square test was done to obtained significance. The inferential Statistics were calculated.

Result: The analysis suggests that while there are significant associations between knowledgescores and certain demographic variables like religion (p = 0.033) there isn't a clear association with others such as age (p= 0.346), occupation, (p= 0.558), income (p=0.496), or sources of information(p=0.780). This indicates that

knowledge scores might be influenced by religious affiliation but not necessarily by other demographic factors in this data

Conclusion: It conclude that there was average level of knowledge in adolescent girls regarding nutritional diet that can prevent malnutrition and for the association between knowledge and demographic variables only religion had significance, no any demographic variables were significant.

Keywords: -Nutritional Diet, Knowledge, Malnutrition, Adolescents girls,

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INTRODUCTION:

Malnutrition has become an urgent global health issue in all age groups as especially in adolescents. It is found that adolescents constitute one-fifth of the total global population in which adolescent girls have devastating sting effects of malnutrition on them due to lack of knowledge.

Malnutrition is a condition that refers to deficiency or excess of essential nutrients in humans. It also refers to a condition resulting from an imbalance between the body's nutritional needs and the intake of nutrients and is a remarkable public health issue globally. The causes of malnutrition are multifaceted and interrelated, and are classified into immediate, underlying, and basic factors. Immediate causes include inadequate dietary intake and disease whereas, underlying causes encompass food insecurity, poor maternal and childcare practices, insufficient health services, and unhealthy environments. Basic causes consist of broader socioeconomic, political, and cultural influences that affect the availability and accessibility of resources needed for proper nutrition. In addition, one more cause involved is knowledge regarding notional diet intake that affects malnutrition. It is characterized by certain symptoms like weight loss pigmentation, fatigue, swelling, loss of muscle mass, etc. Malnutrition encircles, undernutrition, which consists of wasting, stunting, and deficiencies of essential vitamins and minerals, and over nutrition, which involves overweight and obesity. Malnutrition affects individuals of all ages but is particularly detrimental to children, pregnant women, adolescents and the elderly, leading to long-term health issues, impaired cognitive development, and increased morbidity and mortality. Studies have found that malnutrition during adolescence phase have a long-standing effect and can damage adult livelihood. In addition to. common health risks, adolescent girls are more susceptible to infections, face difficulties in recovering from illnesses and surviving childbirth in future or more likely to deliver low birthweight babies creating a vicious cycle.

Malnutrition among adolescent girls is a significant public health concern with far-reaching consequences. Addressing this issue requires a comprehensive approach that includes improving access to nutritious food, enhancing healthcare services, promoting nutritional education, and addressing socioeconomic and cultural barriers. By focusing on the unique needs and challenges

faced by adolescent girls, we can improve their health outcomes and support their development into healthy, productive adults.

RESEARCH MATERIAL AND METHODOLOGY:

The research adopted a quantitative approach with a descriptive research design to assess the knowledge regarding nutritional diet in prevention of malnutrition among adolescent's girls in selected higher secondary schools of Waghodia taluka. Data was collected from 60 adolescent girls of two schools of Waghodia. A structured knowledge questionnaire was selected as a appropriate method of data collection. Investigator use Simple Random Sampling technique.

Preliminary to the data collection a permission was obtained from relevant authorities, of respective schools to conduct the survey, and a schedule outlining of the research activities was submitted to the research guide to ensure the proper oversight. The tools were subjected to the consent validity through the different expert's evaluations, and reliabilty was established with a satisfactory test where p value less than 0.05 level. Analysis of the collected data involved utilizing the statistical measure such as frequency, knowledge scores, percentages and standard deviation, chi square to obtain the visions of relations between variables

RESULT:

Table 1: Frequency and percentage distribution of demographic variable of the adolescent girls

Demographic Variables	Categories	Frequency (f)	Percentage (%)
Age in year	13 Year	01	1.7%
	14 Year	07	11.75%
	15 Year	14	23.3%
	16 Year	25	41.7%
	17 Year	13	21.7%
Religion	Hindu	58	96.7%
	Muslim	02	3.3%
	Christian	0	0
	Sikh	0	0
	Others	0	0
Occupation of the family head	Unemployed	06	10%
	Elementary occupation	09	15%
	Plant & machine operators and assemblers	01	1.7%
	Crafts & related trades workers	02	3.3%
	Skilled agricultural & Fishery workers	24	40%
	Skilled workers and shop 7 market sales workers	17	28.3%
	Clerks	01	1.7%
	Technician and associate professionals	0	0
	Legislators, seniors official & managers	0	0
	Illiterates	06	10%
	Primary school	19	31.7%

Education of the head of the family	Middle School	21	35%
	High School	13	21.7%
	Intermediate or diploma	01	1.7%
	Graduate	0	0
	Profession or Honours	0	0
Total monthly income of the family	< 3907	14	23.3%
	3,908 – 11,707	05	8.3%
	11,708 – 19,515	06	10%
	19,516 – 29,199	05	8.3%
	29,200 – 39,032	07	11.7%
	39,033 – 78,062	15	25%
	>78,063	08	13.3%
Source of information	Mass media	21	35%
	Family & friends	32	53.3%
	Neighbours	02	3.3%
	Television	05	8.3%

Table:- 2 Knowledge regarding nutritional diet in prevention of malnutrition among adolescents' girls

Knowledge score	f(%)	Score Range	Mean	SD
Poor knowledge	19	2.00	1.916	0.7431
Average knowledge	27			
Good knowledge	14			

Table: - 3 Association between knowledge regarding nutritional diet in prevention of malnutrition among adolescents' girls with selected demographic data.

Demographic Variables	**Categories**	**Knowledge Score**			**χ2 value**	**df**	**p value**
		Poor	Average	Good			
Age in year	13 Year	0	0	1	8.96	8	0.346^{NS}
	14 Year	1	6	0			
	15 Year	5	6	3			
	16 Year	8	10	7			
	17 Year	5	5	3			
Religion	Hindu	19	27	12	6.798	2	0.033*
	Muslim	0	0	2			
	Christian	0	0	0			
	Sikh	0	0	0			
	Others	0	0	0			
	Unemployed	1	3	2	10.668	12	0.558^{NS}
	Elementary occupation	5	3	1			

Occupation of the family head	Plant & machine operators and assemblers	0	1	0			
	Crafts & related trades workers	2	0	0			
	Skilled agricultural & Fishery workers	7	11	6			
	Skilled workers and shop 7 market sales workers	4	8	5			
	Clerks	0	1	0			
	Technician and associate professionals	0	0	0			
	Legislators, seniors official & managers	0	0	0			
Education of the head of the family	Illiterates	2	3	1	2.628	8	0.955^{NS}
	Primary school	5	9	5			
	Middle School	7	9	5			
	High School	4	6	3			
	Intermediate or diploma	1	0	0			
	Graduate	0	0	0			
	Profession or Honours	0	0	0			
Total monthly income of the family	< 3907	6	7	1	11.383	12	0.496^{NS}
	3,908 – 11,707	1	3	1			
	11,708 – 19,515	1	2	3			
	19,516 – 29,199	2	2	1			
	29,200 – 39,032	2	3	2			
	39,033 – 78,062	2	8	5			
	>78,063	5	2	1			
Source of information	Mass media	7	9	5	3.223	6	0.780^{NS}
	Family & friends	11	13	8			
	Neighbours	0	2	0			
	Television	1	3	1			

FINDINGS:

The research investigations provides detailed insights into the relations between different variables with regarding to adolescents girls residing in Waghodia taluka . Firstly assessing the age group in frequency and percentage distribution of demographic variable of adolescent's girls , it was found that majority of the proportion (41.7%) consist of individual age 16 followed by 15 year age group having 23.3% while 13,14 and 17 age group had 1.7% 11.75% and 21.7% respectively. Where as in the religion statistically Hindu Religion dominated with 96.7% and muslim with 3.3%, on contrary Christian and Sikh community were not reported in the study. Morever the occupation

spectrum of head of the family varies widely,the skilled and fishery workers stand highest with 4.0%, elementary with 15% and unemployed with 10% while other occupation had smaller or absent proporton . in addition, education level of family head also showed diversity with predominance of 35% completion of middle school along 31.7% of primary school, And High school education acquired 21.7% whereas the illiterate had the smallest percentage. The total family income distribution indicated 23.3% of the family earning keys than 3907 currency units. Lastly the highest source of information was from family and friends
(53.3%), along with mass media at 35% and neighbor and television had 3.3% and 8.3% respectively.

Additionally, the study also helped in assessing knowledge regarding nutritional diet in prevention of malnutrition among adolescent's girls where they were judged on basis of the score they obtain. It was clearly evident that average knowledge level girls were standing more than good and poor knowledge level girls with mean score of 1.916 and standard deviation of 0.743.

Lastly, the findings also gave overview on correlations between knowledge score and selected demographic variables. It was calculated that there was only religion that was associated with knowledge score with $p = 0.033$ on the other hand variables like age, occupation, education, income, and source of information had no any significance. Therefore, this indicated that religion might affect the knowledge level regarding nutritional in prevention of malnutrition among adolescent girls.

CONCLUSION:

Based on the observations, it was concluded that the adolescent girls had average knowledge regarding nutritional diet for preventing malnutrition and that the socio demographic components like age, occupation of family head, education of family head, total monthly income of family and source of information had no effect on knowledge , while religion played a significant role in influencing knowledge of nutritional diet in prevention of malnutrition .

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