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NUTRITIONAL STATUS OF RURAL ADOLESCENT GIRLS



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Abstract:-Adolescence is the process of development from childhood to maturity and adulthood. The present investigation was undertaken to study the nutritional status of rural adolescent girls by using anthropometric measurement, test of hemoglobin 50 girls from age group +13 to +16 are selected from priyadarshini girls school Patoda, and dietary intake. Result indicate that 82.5% respondent belongs from low BMI i.e. <18.5, while 21% respondent having hemoglobin below 10.00mg/dl. There is need to develop awareness about balanced diet.

Keywords: Nutritional Status , Adolescent Girls , anthropometric measurement , physically and emotionally.

INTRODUCTION

Adolescence is the period between childhood and adulthood and it is often mentioned as the period of transition. It is a challenging period physically and emotionally. Emotional and intellectual development often confuses the adolescence. Some of them take food as their target of vengeance and hence many eating disorders are prevalent among adolescents.

Adolescence is a period of rapid growth after infancy. Internal activities like secretion, hormonal reactions, and basal metabolism and biochemical reactions are more during this stage. The nutritional status of adolescent girl who are the future mothers, contribute significantly to the nutritional status of community. It is only recently that efforts, although small, have been made to include adolescent girls as beneficiaries in some of the health and nutrition intervention programme. Adolescence is the period of increased nutritional needs. Nutritional deficiencies in adolescence are consequences of improper supply of nutrients. Nutritional status is the condition of health of an individual as influenced by the nutrient intake and utilization in the body. It can be determine with the help of clinical examination of symptoms of nutritional deficiencies, dietary intake, and anthropometry and laboratory investigations. When these methods are used in combination, like dietary assessment with anthropometry and other method provide better picture of assessment of nutritional status of adolescent girls. So studying nutritional status of adolescent girls could be important step towards preventing the malnutrition in them. Hence the present investigation was undertaken to study the nutritional status of rural adolescent girls by using dietary survey, anthropometric measurements and test of hemoglobin level. The present study was conducted in Patoda (Dist. Beed). Majority population is working as a farmer and sugarcane cutter. The present study was conducted on a school going adolescent girls were attending the higher secondary school. Objectives:-

- 1) To study current status of nutritional anemia in adolescent girls.
- 2) To record their anthropometric indices. i.e. Height, Weight and BMI

REVIEW OF LITERATURE:-

1) Sweta Singh, Sangeeta Kansal, Alok Kumar

“Assessment of nutritional status of adolescent girls in rural area of district Varanasi” (Anivikshiki, Bimonthly International Journal of all Research, Nov.-Dec.-2012) this study found that majority (57%) of adolescent girls have normal BMI, (27%) have lower BMI.

2) Patil S.N., Wasnik V., Wadke R.

“Health problems amongst adolescent girls in rural area of Ratnagiri District of Maharashtra” (walawal karmmedical college.com, October 2009) in this study majority of the girls had clinically obvious nutritional deficiency diseases. Two third of the study subjects were under-nourished (BMI < 18.5 kg/m²)

3) Swati Mahaja “Nutritional Assessment of Adolescent Girls in Jalna of Maharashtra” (research paper in proceeding of U.G.C. sponsored National seminar at Venutai Chavan Arts and Commerce Women's College, Ambajogai, Dist. Beed (MS), in this study 62% of respondent are observed to be underweight.

MATERIALS AND METHODS:-

Sample size: - The present study was undertaken to assess the current nutritional status of adolescent girls belonging age group +13 to +16 yrs. The sample size was 50 girl students. Background information, anthropometric measurements were recorded through questionnaire. Hemoglobin level was tested by pathologist.

Anthropometric measurement: - The present study includes height and weight. Measurement of standard height was with the help of shoe-off; body standing straight with the

help of measuring tape was measured. Weighing balance was used for recording weight in kilograms.

RESULT AND DISCUSSION:-

Socio-Economic profile: - Table No.1

PROFILE	GROUP	% OF RESPONDENT
Type of Family	Joint	27
	Nuclear	73
Size of family	1-5 members	52
	6-10members	29
	11 -15members	19
Age of Adolescent	+13 to +14	46
	+15 to +16	54
Income of family	1000 -5000	12
	6000 -10,000	34
	11,000 -15,000	24
	16,000 -20,000	17
	Above 20,000	11
Ordinal position	I	36
	II	32
	III	30
	IV	02

It is observed from table no.1, that 73% of respondent belonging to nuclear family and 27% from joint family.52% of respondent were from small family size consisting of 1-5 members whereas 19% were from large family size consisting 11-15 members.46% and 54% respondent belong to the age group +13to +14 and +15 to +16 respectively.34% respondent belonging from 6000-10,000 income group family and only 11% girls were from above 20,000 income group family. Ordinal position of respondent at no four is only 2%, while 36%,32% and 30%were first, second and third respectively. Anthropometric measurement: - The mean height of girls was found to be 154.2cms. And mean weight was 39.45kgs

Body Mass Index of adolescent Girls (BMI):- Table No.2

Grade	BMI	% of Respondent
Under weight	< 18.5	82.5
	18.5 - 24.9	17.5
Over weight	25 - 29.9	-
	30 - 34.9	-
Obese grade II	35 - 39.9	-
	>40	-

Data from table no.2 indicates that 82.5% respondents belong to underweight (<18.5BMI) which is alarming and needs to attention to supplement their food with additional sources of calories so that they become normal. Only 17.5% respondents were belonging to normal range of 18.5-24.9 BMI indicating their normal growth and

development.

Hemoglobin level of respondent:-Table No.3

Hemoglobin level(mg/dl)	% of respondents
8.5-10	21
10.1-11	37
11.1-12.4	51
12.5 and above	01

21% respondents having hemoglobin level in the range of 8.5-10mg/dl, they need to increase hemoglobin level by taking iron rich food. 89% respondent found non-anemic. The adolescent girls based on their hemoglobin levels categorized into non-anemic and anemic. The cut –off for which was 12mg /dl (WHO/UNICEF/UNO).Normal hemoglobin level is 10-12.5mg/dl.

Dietary intake :-One day recall of diet is studied. It is found that majority of respondents were not taking enough nutritious food due to ignorance about nutrition, eating habit of fast food and likes And dislikes about some food items. Conclusion: - From above study it is concluded that due to dislike of some food respondent did not take enough food it results into low body weight. There is need to develop awareness about importance of balanced diet.

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