

**NUTRITIONAL STATUS OF COLLEGE GIRLS OF BHILAI****SUDHA AGRAWAL<sup>a1</sup> AND RUBY ALLEPPA<sup>b</sup>**<sup>ab</sup>Department of Zoology, Bhilai Mahila Mahavidyalaya, Hospital Sector, Bhilai, Chhattisgarh, India

In India, several studies have been done to determine the nutritional status of various vulnerable groups such as children pregnant and lactating women etc. However, very scanty attention has been given to adolescence (particularly adolescent girls) have been practically neglected for such studies.

Adolescence is the most crucial phase of growth in the life span of a human being. Growth on all counts –physical mental and psychological, is most rapid during adolescence. High percentage of adolescents were found to possess low body weight and height compared to standard values (Shrikantia, 1969, Pachauri and Jamshedji, 1983, Aras et al., 1980 and Raman et al., 1989).

Policy makers and planners are, therefore giving more attention to nutritional status of adolescent girls because they would be the mothers in near future. To improve child survival and giving birth to healthy baby optimum growth of adolescent girls is of utmost importance. Hence assessment of nutritional and health status of adolescent girls is most essential.

Prevalence of anaemia among adolescent girls is of great concern as they enter reproductive life soon after attainment of menarche.

**OBJECTIVE**

The present study has been planned with the objective of assessing the nutritional status, prevalence of anaemia and other nutrient deficiency disorders in rural adolescent girls from Chhattisgarh region of the country. Since hardly any reports on nutritional level of adolescent girls was unavailable from this study.

**B.M.I VALUES**

25-18.5  
<18.5-17  
<17-16  
<16

**METHODOLOGY**

Several method indicators like assessment of nutritional status. Clinical examination and nutritional anthropometry are commonly used in routine surveys, while clinical survey reveals anatomical changes due to malnutrition that can be diagnosed by naked eye.

Anthropometry can help in the assessment of sub clinical stages of malnutrition. It has been recognized as a reliable tool in identification of nutritionally vulnerable groups, monitoring changes in the extent of malnutrition selection beneficiaries in the intervention programmes, and evaluating the impact of interventions.

**MEASUREMENTS - Anthropometric measurement**

1. Height of the adolescent girls will be measured in a standing position to the nearest 0.1cm. with help of measuring tape.
2. Sitting height and knee heel length.
3. Weight –A portable weighing machine will be used to record the body weight to the nearest 0.1 kg.
4. Body mass index of each girl will be calculated from recorded measurement (weight(kg) and height (Mt) using the formula.

$$\text{B.M.I.} = \frac{\text{weight(kg)}}{\text{height(meter)}^2}$$

On the basis of body mass index values the adolescent girls will be categorized into normal's and those having under nutrition of different grades as given below:-

**CLASSIFICATION**

Normal  
Mild Undernutrition  
Moderate Undernutrition  
Severe Undernutrition

**RESULTS**

**Table 1: Nutritional Status of College Girls**

| BMI Values                | Classification         | General   |       | OBC       |       | ST        |       | SC        |       |
|---------------------------|------------------------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|
|                           |                        | Total no. | %     |
| Total no of girls student | 131                    |           | 29    |           | 39.69 |           | 17.56 |           | 13.74 |
| 30-25                     | Above normal           | 5         | 38.16 | 2         | 3.85  | —         | —     | —         | 5.55  |
| 25-18.5                   | normal                 | 19        | 50    | 39        | 75    | 14        | 60.87 | 12        | 66.67 |
| <18.5-17                  | Mild under normal      | 8         | 21.05 | 5         | 9.61  | 7         | 17.39 | 3         | 16.67 |
| <17-16                    | Moderate under normal  | 4         | 10.53 | 6         | 11.54 | —         | —     | 3         | 16.77 |
| <16                       | Severe under nutrition | 2         | 5.26  | nil       | nil   | 2         | 8.69  | —         | —     |
|                           | <b>TOTAL</b>           | <b>38</b> |       | <b>52</b> |       | <b>23</b> |       | <b>18</b> |       |

Anthropometry viz height and weight were recorded 131 college girls and BMI was calculated.

(Table -1). It is observed that General category has low % of Normal girls as compare to SC and ST girls but severe under nutrition in ST was 8.69 %.In general category 38.16 % obese girls was found which is higher as compare to other categories.

**CONCLUSION**

The percentage of malnourished girls is alarming and steps need to be taken to improve their nutrition status. The observation thus suggest that college going girls need awareness about better nutrition. Sincere efforts should be taken for corrective measures well in time because timely action would be fruitful. Further studies should be made to identify the factors responsible for it.

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