THE STUDY OF ANAEMIA IN TEENAGE GIRLS

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ABSTRACT: Anaemia is decrease in the total amount of red blood cells or haemoglobin in the blood or a lowered ability of the blood to carry oxygen. Without enough iron, your body will make fewer RBCs or will produce smaller RBCs than normal. According to the World Health Organization (WHO), iron deficiency is the top nutritional disorder in the world. Research suggests that as many as 80 percent of people in the world don’t have enough iron in their bodies. It also suggests that as many as 30 percent of people have anaemia due to prolonged iron deficiency. The symptoms are often feeling tired, shortness of the breath etc. Adolescence is a vulnerable period in human life cycle characterized by rapid growth and development. This study is focused on the contribution of important data regarding anaemia prevalence in teenage girls. This study also aims to look into contributive factors such as income, education and nutritional parameters.

Keywords: Anaemia, Teenage girls, Haemoglobin levels, Iron deficiency.

INTRODUCTION:
Anaemia is defined as a condition in which the haemoglobin level is less than the normal level in the body, which leads to decrease in oxygen carrying capacity. The oxygen that is inhaled simply doesn’t stop in lungs, it circulates throughout the body. To make adequate haemoglobin body requires high dosage of iron.
Anaemia due to iron deficiency is the most common kind of anaemia. It occurs mainly due to lack of iron in a person’s diet. A teen with iron deficiency would have lower haemoglobin production and consequently lower RBC, the person is regarded as anaemic. The signs of anaemia are paleness and tiredness.
There are several different types of anaemia and each one has a different cause. The most common type of anaemia is iron deficiency anaemia.
Teenage girls get anaemia, as they grow rapidly, the amount of iron intake may not be enough to keep up with the pace of the growth as it needs more nutrients in this process. In case of girls they need more iron after puberty and are at risk due to heavy blood loss during menstrual periods. Also, teen who observe dieting excessively to lose weight may also be at risk of having iron deficiency anaemia. Bleeding causes the loss of red blood cells and loss of iron. Inside every red blood cells is the protein called haemoglobin, which carries oxygen to every cell in our body. Iron is a part of haemoglobin. Iron enters in food and leaves the body primarily when we bleed. Bleeding causes the loss of red blood cells and lot of iron. That is why teenage girls are particularly susceptible to iron deficiency anaemia.
The present study was focused on anaemia in teenage girls of age group 12-14 years of age. The affect of anaemia during adolescence not only interrupts the growth of a girl but may have an effect on her offspring at a later stage. Therefore, the study of factors contributing to anaemia will have a significant impact on health and well-being of women and the future generation.

OBJECTIVES:
1) To bring awareness of anaemia in teenage girls in relation to their socioeconomic and nutritional factors.
2) To educate about the impact of anaemia on health and dietary changes and role of supplementation.

METHODOLOGY:
The present study was undertaken in teenage girls of government school, Bojagutta Hyderabad. A target group of 100 students was taken for the study.
- Anaemia prevalence in the target group had studied through haemoglobin estimation by Sahli’s method.
- Details of height, weight has noted.
- Dietary advice through lectures and distribution of dietary supplement was undertaken.

RESULT:
TABLE-1: Number and percentages of girls according to haemoglobin levels.

<table>
<thead>
<tr>
<th>Target groups</th>
<th>Haemoglobin level (g/dl) Before supplement</th>
<th>Haemoglobin level (g/dl) After supplement</th>
</tr>
</thead>
<tbody>
<tr>
<td>53% of students</td>
<td>&lt;10.00</td>
<td>&lt;11.500</td>
</tr>
<tr>
<td>27% of students</td>
<td>11.00-11.99</td>
<td>12.00-13.00</td>
</tr>
<tr>
<td>20% of students</td>
<td>12.00</td>
<td>13.00-14.00</td>
</tr>
</tbody>
</table>
DISCUSSION:

In this study, a significant association of anaemia was found with Socio Economic status which may be due to the availability of high quality of food with better Socio Economic conditions.

Most cases of anemia caused by iron deficiency are mild and do not cause complications. However, if iron is not added back into your diet, it can lead to other health problems.

Iron tablets can help restore iron levels in your body. Eat a diet high in iron-rich foods and vitamin C to prevent low blood-iron levels. May also refer you to a dietitian or nutritionist. These specialists are trained in healthy eating. Symptoms like fatigue and pallor indicate possible Iron deficiency and the resulting anemia. Blood tests can determine iron levels in the body, the number of red blood cells you have and the level of your hemoglobin. Iron deficiency may be corrected by dietary changes, but you may also need iron supplements. Since iron deficiency can be caused by factors other than diet, the correct diagnosis is important. If you have questions or concerns, consult a health-care professional.

Vegetarians and vegans should make sure they’re eating enough beans, tofu, dried fruits, spinach, and other dark vegetables. They should incorporate iron-fortified foods into their diet regularly. According to the National Institutes of Health’s Office of Dietary Supplements, vegetarians who don’t eat animal products may need nearly twice as much iron on a daily basis as people who eat animal products. This is because iron from plant foods may not be absorbed as easily or completely as iron found in animal products, such as meat. Diets high in red meat, dark leafy vegetables, dried fruits and nuts, iron-fortified cereals, or bread can help treat or prevent iron deficiency. Vitamin C helps your body absorb the iron you eat.

Iron deficiency anemia secondary to inadequate dietary iron intake is a common condition. It’s easy to detect and treat through dietary changes and supplements.

Teenage girls who have begun to have menstrual periods can prevent iron deficiency anemia by taking multivitamin with iron supplement. The Recommended Dietary Allowance (RDA) for iron is eight milligrams (mg) per day for female ages 9 to 13 years and 15mg per day for female ages 14 to 18 years.

In the present study, the mean height and mean weight of subjects without anaemia, which suggests that anaemia affects the overall of adolescents.

CONCLUSION:

A significant association of anaemia with socio-economic status and parents educational status suggests a need to develop strategies for intensive adult education. This should be supported by programs for the prevention of anaemia among adolescent girls through nutrition education.

REFERENCES: