

EFFECT OF NUTRITION EDUCATION ON IRON-DEFICIENCY ANAEMIA RELATED KNOWLEDGE OF ADOLESCENT GIRLS

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ABSTRACT

India is home to 243 million adolescents – the most of any country. Sadly a large number of India's adolescents are anemic- out of which 56 percent are girls. Iron deficiency anemia is one of the most prevalent deficiencies and therefore, nutrition education programs are important to make people aware about it. The present study was carried out to know the effect of nutrition education on the knowledge of adolescent girls about iron-deficiency anemia. A total of 20 girls (18 years old) were selected through random sampling and their knowledge about anemia was tested through pre and post test questionnaire. After the pre test questionnaire, nutrition education was given to all the twenty girls for four weeks through small lectures, pictorial slide presentations, booklets etc. The same questionnaire was given to the girls in the fifth week and the results were calculated in the same way. The results showed a significant difference which proved that nutrition education is an effective means to improve knowledge, food choices and dietary habits. It helps in increasing awareness and can help to combat iron deficiency anemia and ultimately help in the well being of our society.

Keywords: *Nutrition education, Anemia, Nutritional knowledge, adolescent girls.*

INTRODUCTION

Adolescence is the period of transition between childhood and adulthood. This is a vulnerable period in human lifecycle when nutritional requirements increase due to adolescent growth spurt.

In the recent times, people have become highly deficient to iron and this trend has been rising among adolescents as well, especially teenage girls. Almost one- fifth of the world's population is adolescent girls and eighty four percent of this is in developing countries. According to UNICEF, India is a home to 243 million adolescents – the most of any country. Sadly a large number of these adolescents are anemic- out of which 56 percent are girls.

Iron deficiency is basically anemia which occurs when there is less amount of iron in the body to make red blood cells. Iron is essential for hemoglobin formation and it helps in transporting oxygen to all parts of the body with blood circulation. Anemia can affect anyone but it is fairly common in teenage girls. The cause of iron deficiency anemia is low iron intake along with low iron absorption in the body. Other possible causes can be improper digestion, low immunity, intestinal infections, vitamin A or vitamin C deficiency or genetic factors. Due to heavy menstruation, severe blood loss occurs which can also lead to iron deficiency.

When less iron is absorbed, there is lack of oxygen in the body which leads to tiredness. In case of severe anemia, even dizziness, weakness and shortness of breath can occur. Adolescent girls are more prone to the effects of malnutrition and anemia due to their erratic eating patterns, poor dietary habits and lack of nutritional knowledge. Iron deficiency anemia may lead to the risk of degraded reproductive health of young girls and even preterm and low birth weight infants.

Nutrition education is an effective method for improving the dietary habits and eating patterns in adolescents. It is equally important as any other education as it helps in building a good nutritional status for the girl who is going to be a mother tomorrow. This knowledge will not only help her, but also her family and ultimately the community. Thus, this study was conducted to improve the nutritional knowledge and to increase awareness related to iron deficiency anemia among adolescent girls.

MATERIALS AND METHODS

Selection of the subjects: A total of 20 girls (18 years old) were selected through random sampling from Raghunath Girls post graduate college in the Meerut district of Uttar Pradesh, India.

Questionnaire: The nutritional knowledge was assessed with a pre and post test questionnaire which comprised of general information about the subjects such as name, age etc. The questions asked were about iron deficiency anemia, hemoglobin levels, food items high in iron and folic acid, iron absorption and about basic awareness related to anemia. All questions were multiple choice questions. One mark was given for each correct answer and zero for every incorrect answer.

Nutrition Education: The nutrition education was imparted to all of the 20 girls through pictorial slide presentations, folders, interactive lectures & discussions for a month. All the modes used covered the topics related to questions asked in the questionnaire. Various recipes of healthy juices, smoothies etc, were shared in the form of booklets. The same questionnaire was given to the girls in the fifth week to assess the impact of nutritional education on them. The scores were calculated in the same manner. If scores of the girls are higher in post test than in pre test,

there is a gain in nutritional knowledge. The significance was calculated using statistical software.

RESULTS AND DISCUSSIONS

The Table1 represents the effect of nutrition education on the iron-deficiency anemia related knowledge of adolescent girls.

Table1

Effect of nutrition education on iron-deficiency anemia related knowledge of adolescent girls

S. No.	Nutritional knowledge	Mean Score (SD)
1	Before Nutritional Education	9.10 (2.47)
2	After Nutritional Education	17 (2.05)

The mean value of the post test results was higher than the pre test results. The result was calculated as significant by using paired t test.

Hence, the nutrition education related to iron deficiency anemia, imparted to the adolescent girls, was helpful and had a good impact on their nutritional knowledge.

CONCLUSIONS

- ✓ Nutrition education with effective communication increases nutritional knowledge about iron deficiency anemia in adolescent girls.
- ✓ This knowledge will help to improve dietary habits and food choices.
- ✓ This knowledge will be passed on to other individuals and their family members by these girls and this will eventually result in better health and well being of our society.

RECOMMENDATIONS

- Nutrition education programs should be created in schools and colleges for adolescent girls. This will help them in adopting good eating habits at a young age.
- These education programs will empower youth by increasing their knowledge about nutrition and health.
- Such programs, if applied as long term strategies, can help to even combat malnutrition and other related problems.

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