"A Pre Experimental Study to Assess the Effectiveness of Planned Teaching Program on the Knowledge Regarding Prevention of Anaemia Among Adolescent Girls in Selected Government Senior Secondary School", Gurgaon, Haryana

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ABSTRACT

Anaemia is a clinical condition that results from an insufficient supply of healthy red blood cells to oxygenate the body's tissue adequately; results in hypoxia. It is a deficiency in number of erythrocytes, the quality of haemoglobin and or the volume of packed RBC's. Iron deficiency anaemia is a condition occurring due to decreased haemoglobin synthesis. Adolescence is a crucial developmental period. In adolescent girls on a marginal diet, iron deficiency may be a routine consequence of growth and skeletal development.

Objectives:

1. To assess the level of knowledge regarding anaemia among adolescents in selected Govt. Se. Sec. School, Gurgaon.

2. To assess the planned teaching programme among adolescents.

3. To find out the association between the level of knowledge of adolescents with selected demographic variables.

Results:

Pre-test knowledge scores of anaemia shows that 41.6% (25) of adolescents were having inadequate knowledge and 33.3% (20) adolescents were having adequate knowledge. Post -test knowledge scores of adolescents were 8.3% (5) inadequate knowledge, 50% (30) showed adequate knowledge.

Keywords: *Planned teaching, prevention, and anaemia, adolescent*

INTRODUCTION:

Anaemia is a clinical condition that results from an insufficient supply of healthy red blood cells to oxygenate the body's tissue adequately; results in hypoxia. It is a deficiency in number of erythrocytes, the quality of haemoglobin and or the volume of packed RBC's. Iron deficiency anaemia is a condition occurring due to decreased haemoglobin synthesis. Adolescence is a crucial developmental period. In adolescent girls on a marginal diet, iron deficiency may be a routine consequence of growth and skeletal development.

Adolescents constitute about 25% of the population and from an important physiological group whose nutritional needs demand special attention.

Adolescence is a period of rapid growth, weight gain and blood volume expansion. The overall iron requirement of the body increases in this period. At the same time the risk of iron deficiency anaemia among boys and girls appears to be more due to growth spurt, and in girls it remains high during their reproductive life.

In India, anaemia affects an estimated 50% of the population. Numerous studies shown that the prevalence of anaemia among adolescent girls is high. India has one of the fastest growing youth populations in the world, with an estimated 190 million adolescents. Girls below nineteen years of age comprise one quarter of India's growing population.

NEED OF THE STUDY:

Adolescence has been defined by WHO as the period of life spanning between the age of 10- 19 years. This is the formative period of life when the maximum amount of physical, psychological and behavioural changes take place. This is a vulnerable period of human life cycle for the development of nutritional anaemia. Girls are more likely to be victims due to various reasons. In a family with limited resources, the female child is more likely to be neglected. The girls are more deprived of good food and education and are utilized as an extra hand to carry out the household chores. An added burden of menstrual loss precipitates the crises too often.

As rapid development take place in this period, they need more nutritious and healthy diet. Iron is needed for the expansion of blood volume, muscle mass and also gain 20% of adult weight and 30% of adult's height during adolescence period.

Anaemia is one of the most common diseases in adolescence period, hence it offers to acquire knowledge about optimal nutrition that could prevent or delay adult onset, and diet related illness in later stages of life. Anaemia reduces physical activity and cognitive function, learning and scholastic performance in school entering adolescents. In this modernized era, School going adolescents are skipping meals to make them thin and slender and many of them tend to have fast food or junk food. This also leads to deficiency of healthy rich diet and in turn contributing to anaemia in adolescents.

A study conducted by the International centre for research on women mentioned that adolescent anaemia in both males and females include: Nepal 42%, India 52%, and Cameroon 32% respectively.

A cross sectional study was carried out in Dhaka among 65 adolescents to investigate the dietary pattern. The results showed that there was a deficit of 437 kcal/day in energy and prevalence of anaemia was 23%.73.8% of the participants were not aware of the source of iron rich foods. The result concluded that the overall nutritional status of the urban adolescent college girls in Bangladesh as a whole was poor.

The above findings showed that the adolescent girls were having inadequate knowledge regarding anaemia and its management. Hence the investigator felt that there is a need to conduct a study which can significantly increase the knowledge of adolescent girls.

PROBLEM STATEMENT

A Pre Experimental Study to Assess the Effectiveness of Planned Teaching Programme on the Knowledge of Anaemia among Adolescent girls in selected Government Senior Secondary Schools, Gurgaon, Haryana.

OBJECTIVES

1. To assess the level of knowledge regarding anaemia among adolescent girls in selected Government senior secondary school, Gurgaon.
2. To assess the planned teaching programme among adolescent girls in selected government senior secondary schools, Gurgaon.
3. To find the association between the level of knowledge of adolescent girls with selected demographic variables.

OPERATIONAL DEFINITIONS

Assess: It refers to the statistical estimation of the knowledge regarding prevention of anaemia among adolescent girls by using structured knowledge questionnaire.

Effectiveness: It refers to the gain in knowledge as determined by the significant difference in pre-test and post-test knowledge as elicited throughstructured knowledge questionnaire.

Knowledge: It refers to the correct response of adolescent girls to the structured knowledge questionnaire on anaemia prevention.

Adolescent girls: The girls between the age group of 16-18 years.

Planned teaching programme: It is systematically planned and organized programme and validated by subject experts.

HYPOTHESIS

H₁: There is a significant difference in the pre-test and post-test knowledge scores of adolescent girls regarding anaemia.

H_2: There is a significant association between the post-test knowledge score of adolescent girls with demographic variables.

REVIEW OF THE LITERATURE

Kumar etal(2006) conducted a study on influence of family's vegetable cultivation on prevalence of anaemia among 80 rural adolescent girls in Allahabad, UP. Among 80 adolescents forty from vegetable grower and forty from non-vegetable grower family's. The findings were prevalence of anaemia is less in vegetable grower family adolescents P level is $P<0.005$.

Senetal (2006) conducted a study on deleterious functional impact of anaemia on young low income adolescent school girls and was conducted in four Vadodara Municipal high schools and sample size was 350. The study concluded that prevalence of anaemia was high i.e. 67% and also found that the non-anaemic girls scored higher than their anaemic counterparts in cognitive tests.

Diwaker (2008) conducted a study on 6,948 rural adolescent girls, India and the findings were 69.40% of girls were anaemic.

Gupta etal (2007) conducted a study on prevalence of anaemia in 160 adolescent girls between the age group of 11-13 years and 100 between 14-17 years studying in government educational institutions of Kurukshetra district, Haryana. The study concluded that maximum i.e 58.08% of them were suffering from moderate followed by mild anaemia 33.85% respectively.

Pande (2008) conducted study on reducing iron deficiency anaemia and changing dietary behaviours among 1000 adolescent girls between the age groups of 10-19 years in Maharashtra, India. The study revealed that 58% of the samples were anaemic (Hb<

12gm/dl) and 40% of them were eating two or fewer meals daily.

SubhraSrimanietal (2008) conducted a comparative study on prevalence of anaemia among rural and urban school going 96 adolescent girls between the age groups 16- 18 years. The study concluded that prevalence of anaemia is high i.e. 81% in rural than Urban with 31%.

Joy P. Mariamma (2011) conducted a quasi-experimental study to assess the effectiveness of self-instructional module on knowledge regarding anaemia among 60 adolescent girls in selected pre university colleges of Mangalore, Karnataka, India. And the result showed significantly increased the knowledge in prevention of anaemia.

Balci YI etal (2012) carried out a study to determine the prevalence and risk factors of anaemia among 1120 adolescent boys and girls aged between 12-16 years in DENIZLI, TURKEY. The results were 59% were diagnosed as IDA, 41% were diagnosed as combined iron deficiency and vitamin B12 deficiency anaemia.

Kokere B.A etal (2013) conducted a study to determine the prevalence of anaemia in 310 school children between the age group of 5-11 years (boys 138 and 172 girls) from three municipal schools, Abidjan. The results were 33.3% in males and 29.1% in females respectively.

METHODOLOGY

Research Approach: Experimental Research Approach

Research Design: Pre-experimental research with one group pre-test post-test design.

Sample and Sampling Technique:

Setting of the study government senior secondary girls school, GURGAON

Population: Target population were Adolescent girls studying government senior secondary schools, Gurgaon

Sampling technique: Non probability convenient sampling technique

Sample size: 60

Inclusion criteria: willing to participate, availability of the samples

Exclusion criteria: not willing to participate, non-availability of the samples

Selection of the Tool: Structured knowledge questionnaire.

Analysis of the data:

Pre-test knowledge scores of anaemia shows that 41.6% (25) of adolescents were having inadequate knowledge and 33.3% (20) adolescents were having adequate knowledge. Post -test knowledge scores of adolescents were 8.3% (5) inadequate knowledge, 50%(30) showed adequate knowledge.

Summary:

Anaemia is a condition in which haemoglobin level is lower than normal. Typically it results when the intake of dietary iron is inadequate for haemoglobin synthesis. Adolescent period is a crucial developmental period. Adolescent girls are caught in menstrual cycles, early marriages, repeated pregnancies and poverty. Hence it is important to educate the adolescent girls regarding prevention of anaemia and its related complications.

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