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A study To Assess the Effectiveness of Self -Instruction Module Regarding Knowledge On Prevention of Iron Deficiency Anemia Among 8th – 10thStandard Girls In Selected school, Pune.

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ABSTRACT:

The purpose of this study was to assess the effectiveness of self -instruction module regarding knowledge on prevention of iron deficiency anaemia among 8th – 10th standard girls

Objectives:

1. Assess the pretest level of knowledge on self-Instruction module regarding prevention of iron deficiency anemia among adolescent girls in selected school, Pune.
2. Plan and administer self-Instruction module regarding prevention of anemia.
3. Assess Post -test knowledge on prevention of iron deficiency anemia among adolescent girls in selected school, Pune.
4. Find the association between knowledge regarding prevention of iron deficiency anemia with demographic variables.

Methods:

Methods: The Conceptual Framework used in the present study based on Kings Goal attainment Model.The study involves evaluative approach and the design was one group pre test post test pre -experimental design.The study was conducted on 30 adolescent girls using structured knowledge questionnaire.

Keywords: self -instruction module, iron deficiency anaemia, adolescent girls.

INTRODUCTION:

Health is a basic human right, and it is at the heart of the concept of quality of life. Adolescence is a stage in life when a person transitions from childhood to maturity. The adolescent era affects girls in the eighth to tenth grades. A period marked by significant biological, psychological, and economic shifts. They account for more than a fifth of India's population.

Adolescence begins with the appearance of secondary sex characteristics and ends with the completion of somatic growth. At this age, a girl begins to menstruate. During adolescence, total nutritional requirements rise to support a period of rapid growth and development.

Anemia is a condition in which the number of red blood cells in the body is reduced, lowering the blood's oxygen carrying capability. Anemia is caused by an iron deficiency, which is the most prevalent cause. Iron deficiency anaemia is characterised by a low HB percent level. One of the micronutrients is iron. It aids in the production of haemoglobin, oxygen transport, brain development, and body temperature and muscular activity management. Iron deficiency occurs when the amount of iron in the body decreases. The main causes of iron deficiency anaemia in adolescent girls are decreased dietary iron intake, poor absorption, worm infestation, increased body demand, and menstruation. Iron deficiency anaemia signs and symptoms

Nowadays, young adolescent girls face numerous challenges as a result of lifestyle changes such as consuming junk foods, fast food, snacking, and skipping meals, all of which are widespread among urban adolescent girls. Some people are malnourished as a result of a lack of awareness about dietary iron and low socioeconomic conditions.

Status, low family income, which is frequent in rural areas, and the fact that adolescent females used to lose 45 ml of blood (i.e. 22 mg of iron) throughout their menstrual period. Iron deficiency anaemia is thought to account for around half of all anaemia worldwide. Iron deficiency is the ninth most common risk factor in the GBD 2000, accounting for 8,41,000 deaths and 35,057,000 disability adjusted life years lost worldwide. Africa

NEED OF THE STUDY

Iron deficiency anaemia is one of the most common nutritional illnesses in the world, with 4-5 billion people (66-80 percent) suffering from it. South East Asia is expected to account for one-fifth of the global population, but it accounts for more than 40% of anemia-related deaths and about a third of DALY (Disability Adjusted Life Year) losses. Because of their rapid growth, bad eating habits, and menstruation, they have a high prevalence of iron deficiency anaemia, which demonstrates their poor nutritional status.

The most prevalent cause of iron insufficiency is menstrual bleeding, which is the most common cause of iron deficiency. Iron deficiency can be caused by a lack of iron in the diet; however, iron insufficiency usually develops over time. Because the body's iron reserves may take several months to deplete. As the amount of iron stored in the bone marrow decreases, the bone marrow generates fewer red blood cells.

According to a World Health Organization (WHO) report from 2008, global anaemia prevalence was 73.5 percent, resulting in 68 million years of disability. According to the WHO, the incidence rate of anaemia in Africa is 61.4 percent in 2008. Anemia affects 56.2 percent of people in the United States. It was 85.4 percent in Southeast Asia. In Europe, 28% of people are

unemployed. The incidence rate of anaemia is 73.5 percent in the Eastern Mediterranean and 96.9 percent in the Western Pacific.

India has the world's highest rate of iron deficiency anaemia among women, with 60-70 percent of India's girls suffering from anaemia (haemoglobin 12 gm/dl). Anemia in adolescent girls has negative consequences, including decreased work productivity and physical limitations. Adolescence is thought to be the greatest time to intervene because it is a period of rapid development.

National Family Health survey in 2006 showed that 56% of adolescent girls are anemic in India. WorldHealthreportof WHO,statesthatthemortalityrateofirondeficiencyanemiais13,704,953 cases in India,2005

Statement of Problem:

A study to assess the effectiveness of self -instruction module regarding knowledge on prevention of iron deficiency anaemia among 8th – 10th standard girls in selected school, Pune.

Objectives:

1) Assess the pre-test level of knowledge on self-Instruction module regarding prevention of iron deficiency anaemia among adolescent girls in selected school,Pune.

2) Plan and administer self-Instruction module regarding prevention ofanaemia.

3) Assess Post -test knowledge on prevention of iron deficiency anaemia among adolescent girls in selected school, Pune.

4) Find the association between knowledge regarding prevention of iron deficiency anaemia with demographicvariables.

Hypothesis:

H1: There will be significant difference between pre-test and post-test level of knowledge regarding prevention of iron deficiency anaemia among 8th -10th standard girls.

H0: There will be no significant difference between pre-test and post-test level of knowledge regarding prevention of iron deficiency anaemia among 8th -10th standard girls.

Review of Literature

Shilpa S. Biradar (2012) did a one-year cross section study on the prevalence and security of anaemia among adolescent girls in rural areas. A one-year cross-sectional study was done at Vantamuri PHC, a field of practise area of J. N Medical College, Belgaum, from January 2008 to December 2008. A total of 840 adolescent girls (10-19 years) were enrolled in the study, and blood samples were taken from them. According to the findings, a high prevalence of anaemia

was discovered in late adolescent females, as well as in girls from low socioeconomic backgrounds.

Edgard Santos (June 2014) did a study on teenage iron deficient anaemia. Anemia is one of the most common dietary deficits that affects people from all walks of life. It is more frequent in underdeveloped nations, with children and teenagers having a far higher chance of contracting it. A total of 102 studies were identified, analysed, and published. For this review, 42 papers that met the inclusion criteria (adolescents with anaemia) were chosen. Finally, the articles were analysed and graded in accordance with the study's objectives. Iron deficiency anaemia affects roughly 20% of teenagers, according to the studies analysed.

The American Society for Nutritional Science (2010) did a study on improving dietary intake in adolescent girls to prevent anaemia. Anemia is linked to a bad diet, low quality of diet or lack of vitamin, insufficient amount ingested, and not sticking to meals, according to the majority of the girls. This case study concludes that in this group of adolescent females, dietary changes to increase iron consumption are possible. To improve consumption of animal sources of iron and vegetal sources with iron absorption enhancers such as vitamin C, a multi-dietary strategy combining an educational complaint with identifying and marketing best buys for iron is required. Iron deficiency prevention

A study on the prevention of iron deficiency anaemia in teenagers was done by the World Health Organization in 2011. Anemia is one of the world's most frequent and intractable nutritional disorders, afflicting both developing and wealthy countries and having serious implications for human health, as well as social and economic development. Iron deficiency anaemia can affect anyone at any age, but it is more common in pregnant women and small children. Iron deficiency is extremely dangerous for adolescents, especially girls. When requirements are at their highest, the frequency is highest between the ages of 12 and 15. Except in Thailand, more than 25% of adolescent girls in the South-East Asia Region are unmarried.

Adolescence is an opportunity time for interventions to address anemia. Not only is there need (growth, preparation for pregnancy), but large numbers of both boys and girls can be reached easily if school attendance or participation in other group activities is high. Also, adolescents are open to new information and new practices since they are often striving for physical or academic excellence

R Nevis Sutha (2012) conducted study on evaluate effectiveness of planned leaching program in improvingknowledgeofpreuniversitystudentssampleof30preuniversitystudentswasselected by lottery system(Single random sampling technology). A structured questionnaire and

observational checklist were found to be suitable for study to assess knowledge of groups of pre university students the finding of this study indicates that the planned health teaching program enhance the knowledge and develop the ability of pre university students. The planned health teaching program is a suitable method of instruction for educating pre university student for disseminating health information.

RESEARCH METHODOLOGY

RESEARCH APPROACH

The research approach was selected as **evaluative approach** to see the'assess the effectiveness of self -instruction module regarding knowledge on prevention of iron deficiency anaemia among 8th – 10th standard girls in selected school.

RESEARCH DESIGN

A one group pre test post test pre -experimental design. Was chosen for the study.

SETTING OF THE STUDY

Study was conducted in selected in selected school of Pune.

POPULATION

In this study population is the adolescent girls in selected school of Pune

SAMPLE

Sample consisted of 30 adolescent girls who are studying in selected school of Pune.

SAMPLING TECHNIQUE

The sampling technique used in this research study is Non probability purposive sampling technique**.**

Major findings of the study

Findings related to the demographic description:

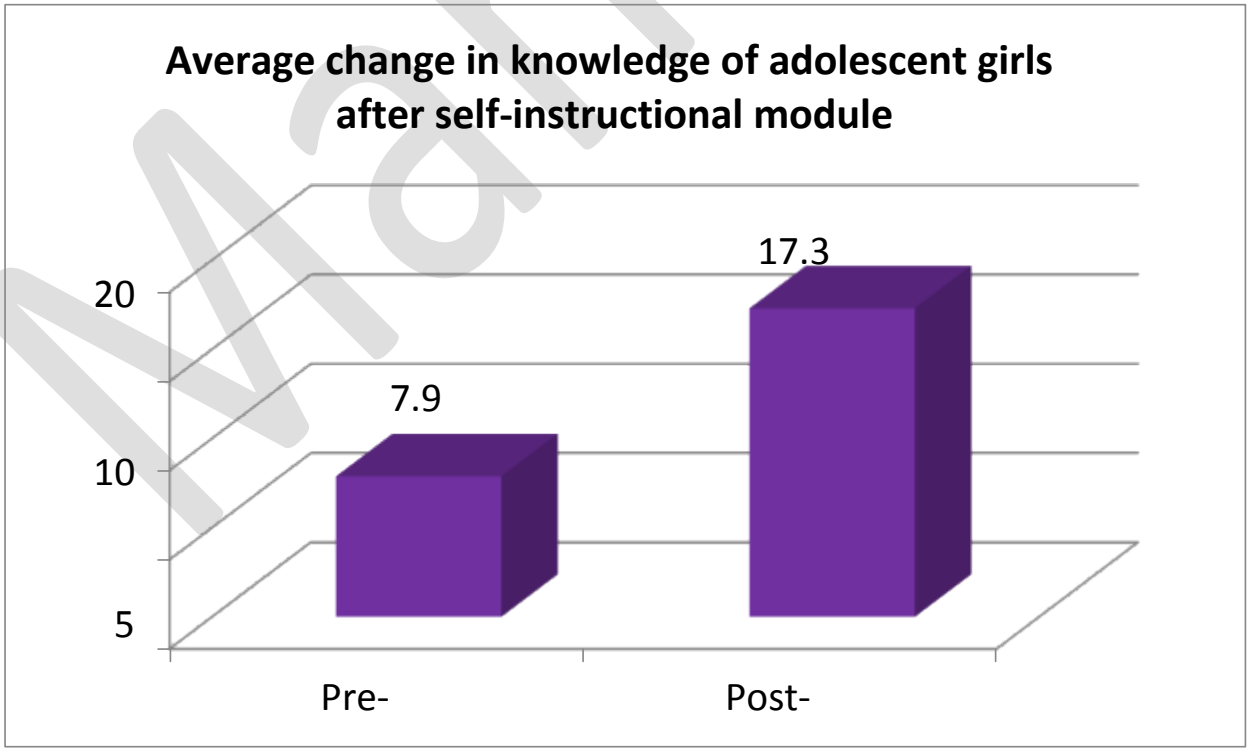
33.3% of the samples had age 13-14 years, 28.3% of them had age 14-15 years, 30% of them had age 15-16 years and 8.3% of them had age 16 and above. 33.3% of them were Hindu,28.3% of them were Muslim,21.7%of them were Christianand16.7% of them were of other religion. 33.3% of their fathers had private job, 21.7% of them had government job, 38.3% of them were self-employed and 6.7% of them had other occupation. 60% of their mothers had private job,11.7% of their mothers had business,23.3% of their mothers had government service and 5% of their mothers had some other occupation. 15% of their fathers had income less than Rs.5000, 56.7% of their fathers had income Rs.5000- 10000, 21.7% of their fathers had income Rs.10000-15000 and 6.7% of their fathers had income above Rs. 15000. 60%of them were from nuclear family, 35% of them had joint family, 1.7%

of them were divorced and 3.3% of them had single parent family.65% of them vegetarian and non-vegetarian diet and 35% of them were vegetarian.

35% of them had knowledge from TV, 30% of them had knowledge from newspaper, 23.3% of them had knowledge from internet and 11.7% of them had knowledge from other sources.

In pre-test, 61.7% of the adolescent girls had poor knowledge (score 0-8) and 38.3% of them had average knowledge (Score 9-16) regarding prevention of iron deficiency anaemia among adolescent girls. In post-test, 61.7% of the adolescent girls had good knowledge (score 17-25) and 38.3% of them had average knowledge (Score 9-16). This indicates that the knowledge of the adolescent girls improved remarkably after self-instructional module.

Researcher applied paired t-test for comparison of knowledge scores of samples before and after self-instructional module. Average pretest knowledge score was 7.9 which increased to 17.3 in posttest. T-value for this comparison was 37.9 with 59 degrees of freedom. Corresponding p- value was small (p-value=0.000, smaller than 0.05), the null hypothesis is rejected. Self- instructional module was found to be significantly effective in improving the knowledge of adolescent girls regarding prevention of iron deficiency anemia.Occupation of father,monthly income of father and source of previous knowledge were small (less than 0.05), age, occupation of father, monthly income of father and source of previous knowledge were found to have significant association with the knowledge of adolescent girls regarding prevention of iron deficiency anemia among adolescent girls



CONCLUSION:

The study concluded that researcher should periodically organize health education for adolescent girls. The various findings of the study show that the knowledge regarding prevention of Iron deficiency anemia related to personal health has been improved through self-Instruction module effectively. Also there is association between knowledge level and variables such as age, occupation of family and family income.

RECOMMENDATIONS

Keeping in view the findings of the study, the following recommendations are made.

- A similar study can be done on a largerpopulation.
- A study can be conducted to asses the attitudes and coping strategies ofadolescent girls with prevention of Iron deficiencyanemia.
- A comparative study can be done between adolescent girls andwomen.
- Astudymaybeconductedtoevaluatetheeffectivenessofselfinstructionalmodule versus other methods of health teaching on the similarproblem.
- A study can be done on association between the various demographic variables, which were significant on largersample.
- A similar study can be done in communitysettings.
- Replication of similar study on largepopulation.

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