



## EFFECTIVENESS OF STP ON KNOWLEDGE AND ATTITUDE REGARDING PREVENTION OF IRON DEFICIENCY ANEMIA AMONG ADOLESCENT GIRLS

### Nursing

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### ABSTRACT

Iron deficiency anemia is one of the most common problems among adolescents and almost one in among ten children have this problem. A study was conducted with a sample size of 60 among the adolescent girls in the age group of 13 – 18 yrs studying in matriculation schools, Chennai using Quasi experimental, pre-test and post test control group design. Samples were selected by using stratified random sampling technique. The tool consisted of the demographic data, structured knowledge questionnaire and Likert's attitude scale. Reliability was checked by using test retest method using Karl Person's Formula. ( $r = 0.981$  for knowledge and  $r = 0.914$  for attitude). Pre-test and post test was conducted in both group and structured teaching programme was administered to experimental group. The data was analyzed using descriptive and inferential statistics. The findings study showed that in control group 16 (53.3%) samples were having moderate level of knowledge in pre-test and 20 (66.7%) samples were having moderate level of knowledge in post test. In experimental group, 19 (63.3%) samples were having inadequate level of knowledge in pre test and whereas 30 (100%) samples had adequate level of knowledge in post-test. In experimental group 25 (83.3%) samples were having moderately favorable attitude in pre test and 30 (100%) samples were having favourable attitude in post test. Hence the study concluded that structured teaching programme was effective in improving the knowledge and attitude towards prevention of iron deficiency anemia among adolescent girls.

### KEYWORDS:

Structured Teaching Programme (STP), Iron deficiency Anaemia, knowledge, attitude, Adolescent girls.

### 1. INTRODUCTION

A child is unique individual; he or she is not a miniature adult, not a little man or woman. Children are major consumers of health care. In India, about 35 % of total population are children below 15 years of age (WHO, 2012). Children always need special care to survive and thrive. They are not only large in number but vulnerable to various health problems and considered as special risk group. Adolescence is the time where many developments takes place both physically and mentally. In this period more nutritious and healthy diet is needed. During adolescence increased iron is needed for the body for the expansion of blood volume and for increasing muscle mass. Adolescence gain 20% of adult weight and 30% adult height in the adolescence period. Anaemia affects all the age groups and both sex in most states of India. Most profoundly affected groups are adolescent girls (74-98%), women (82-98%), and woman in child bearing age (74-99%).

Adolescence is a period of transition from childhood to adulthood. It is characterised by rapid physical, biological and hormonal changes resulting in psycho-social, behavioural and sexual maturation. Adolescence is a period of rapid growth: up to 45 per cent of skeletal growth takes place and 15 to 25 per cent of adult height is achieved during adolescence. The physical and physiological changes that occur in adolescent girls place a great demand on their nutritional requirements and make them more vulnerable to nutritional deficiencies. Specifically, the increase in the lean body mass, the expansion of the total blood volume and the onset of menstruation translate into a significant increase of girls' iron requirements making them more susceptible to anaemia. The adolescent period offers a chance to acquire knowledge about optimal nutrition during young adulthood that could prevent or delay adult-onset diet-related illnesses later on. Anaemia reduces physical work capacity and cognitive function, learning and scholastic performance in schoolgirls entering adolescence. All adolescent girls should know about the importance of iron rich foods, iron intake and functions of iron in human body. It can be done by providing health and nutritional education, weekly supplementation of iron tablets, provision of de-worming tablets etc. Prevention is better than cure. So proper health education and practice of various healthy habits are essential to prevent iron deficiency anaemia among adolescent girls. Educating the group is the first and best method of prevention.

### 2. OBJECTIVES

- To assess the knowledge and attitude of adolescent girls regarding prevention of iron deficiency anaemia in control group and experimental group in pre-test and post test.
- To determine the effectiveness of structured teaching programme regarding prevention of iron deficiency anaemia.
- To find the correlation between knowledge and attitude regarding prevention of iron deficiency anaemia among adolescent girls in control group and experimental group in pre-test and post test.

### 3. METHODOLOGY

Quasi experimental, pre-test and post test control group design was adopted. The study was conducted in Kanchipuram district. Control group was selected from Dawn Matriculation Higher Secondary School in Bharaniputhur, and experimental group was selected from Padma Subramanyam Bala Bhavan Matriculation School in Mangadu both are in rural area. The samples of control group and experimental group consists of 30 children. (10 students each from the section 'A' of VIII, IX and XI classes from respective schools using stratified random sampling technique. The investigator developed an iron deficiency anaemia symptom checklist to identify those who are anaemic and to exclude them from the study.

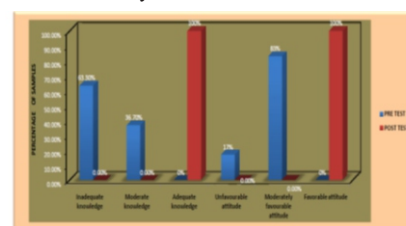


Figure 1  
DISTRIBUTION OF LEVEL OF KNOWLEDGE AND ATTITUDE IN PRE AND POST TEST OF EXPERIMENTAL GROUP

### RESULT

Majority of the samples 55 (91.7%) attained menarche and about 48 (87.27%) were having regular menstrual period. Considerable amount of samples 36 (65.46%) were having menstrual period of 4-6 days and two by third of the samples 45 (81.82%) were Changing 1-3 napkin / day. Majority 51 (85%) were vegetarian. No one is having previous history of anaemia. A considerable amount of samples 45 (75%) were not having information regarding iron deficiency anaemia and 11 out of 15 (73.3%) got information from school. It is evident

that there is no significant change in knowledge and attitude on prevention of iron deficiency anemia in control group with knowledge score of 8.00 and 9.27 in pretest and post test and attitude score of 28.67 and 28.37 in pretest and posttest respectively.

It is evident that there is a significant ( $p < 0.05$ ) increase in knowledge and attitude on prevention of iron deficiency anemia in experimental group with knowledge score of 6.667 and 17.367 in pretest and posttest and attitude score of 27.37 and 43 in pretest and post test respectively. It showed the effectiveness of structured teaching programme.

### CONCLUSION

Girls' iron requirements increase dramatically during adolescent. It make adolescent girls more susceptible to anaemia, which has lasting negative consequences for them and for the survival, growth, development of their children later in life. Adolescent girls required about 12- 28 mg of iron per day. Most of the adolescent girls had no idea regarding prevention of iron deficiency anaemia. After teaching programme their knowledge level was improved and they had a favourable attitude towards prevention of iron deficiency anaemia.

In the control group there was no improvement in knowledge and attitude regarding prevention of Iron deficiency anaemia. The study findings showed that the knowledge and attitude level was increased after structured teaching programme and also education about prevention of iron deficiency anaemia is very useful to motivate the students for practicing healthy eating habits.

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