

Prevalence of Anemia, Knowledge, Attitude and Compliance Related to Weekly Iron Folic Acid Supplementation Programme among the Adolescents in Selected School of South East Delhi

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Abstract: Anaemia is a condition in which the number of red blood cells or the haemoglobin concentration within them is lower than normal. Haemoglobin is needed to carry oxygen and if you have too few or abnormal red blood cells, or not enough haemoglobin, there will be a decreased capacity of the blood to carry oxygen to the body's tissues. This results in symptoms such as fatigue, weakness, dizziness and shortness of breath, among others. The optimal haemoglobin concentration needed to meet physiologic needs varies by age, sex, elevation of residence, smoking habits and pregnancy status. (1) The most common causes of anaemia include nutritional deficiencies, particularly iron deficiency, though deficiencies in folate, vitamins B12 and A are also important causes; haemoglobinopathies; and infectious diseases, such as malaria, tuberculosis, HIV and parasitic infections. 1

Anemia is global public health problem affecting both developing and developed countries with major consequences for human health as well as social and economic development. Anemia affects mainly the women in child bearing age group, young children and adolescents. 2

According to World Health Organization (WHO) Adolescents of age between 10- 19 years. Data show that the number of adolescents is 1.2 billion worldwide and in India 243 million. During adolescence, both in boys and girls, second growth spurt of life is seen, which significantly increases nutritional requirements, especially for iron. Anaemia, due to nutritional deficiency disorder, is an important public health problem among adolescent in our country, primarily occurs due to iron deficiency. According to National Family Health Survey (NFHS)-3, more than 55 percent of both adolescent boys and girls are anaemic. 3

Materials and Methods: Descriptive survey design to assess the prevalence of anaemia, knowledge, attitude and compliance related to weekly iron folic acid supplementation programme among the adolescents. The study conducted on 200 samples. Structured questionnaire and record analysis technique were selected for collecting data -related to knowledge, attitude and compliance.

Results: The sample characteristics revealed that the maximum number of subjects were in the age group 17-18 years. Most (60%) of adolescents were male and 40% were females. Majority (62%) belongs to Hindu religion. 27.5% of family income were between Rs 10001-20000. Majority (24%) of adolescent's father were educated up to intermediate level only. Maximum (41.5%) of adolescent's mothers were illiterate. Majority (50%) of father's occupation were private job and 82% mothers were house wife.

The prevalence of anemia among adolescents was found 44.5% and the prevalence was found higher among girls (57.5%) than boys (35.83%). Majority (66.30%) of adolescents had mild anemia. Majority (32.5%) of adolescents were anemic between age group 17-18. Most (56%) of adolescents were fully compliant to WIFS (IFA). Out of which (62.5%) of adolescent's boys and 46.25% girls were fully compliant to WIFS (IFA) consumption. The main reasons for non-compliance and partial compliance were "side effects of tablets" (87.90%), and main reasons for compliance among adolescents was "Advice from teachers" (52.68%).

The mean knowledge score was 14.37 and attitude mean score was 44.15 shows that adolescents had fair knowledge and had neutral attitude regarding WIFS programme. Data showed a highly positive correlation between the knowledge scores and the attitude scores ($r = 0.88$) of the adolescents regarding WIFS programme which is found to be statistically significant at 0.05 level of significance. It indicates, higher the level of knowledge, more the favorable attitude the adolescents have towards WIFS programme. The association between compliance and knowledge (24.152), attitude (19.211) and anemic status (24.979) were found statistically significant.

There was a significant association between knowledge, attitude and selected factors such as father's and mothers' educational and occupational status and family income except sex and religion. This indicates that knowledge and attitude was dependent by these variables.

Very significant association was found between compliance status and selected factors such as sex, fathers and mothers' educational and occupational status and family income except religion. This indicates that compliance status was dependent and influenced by these variables.

There was found very significant association between anemic status and selected factors such as sex, religion, fathers and mothers' educational status, mothers' occupational status and family income except fathers' occupational status. This indicates that compliance status was dependent and influenced by these variables.

Conclusion: After the detailed analysis of the study findings showed that prevalence of anemia among adolescents was found more among Girls than the boys. Maximum of them were fully compliant to WIFS (IFA). The mean knowledge score and attitude mean score shows that adolescents had fair knowledge and had neutral attitude regarding WIFS programme. Highly positive correlation between the knowledge scores and the attitude scores ($r = 0.88$) of the adolescents regarding WIFS programme that also found statistically significant at 0.05 level of significance. It indicates, higher the level of knowledge, more the favorable attitude the adolescents have towards WIFS programme. The association between compliance and knowledge, attitude and anemic status were found statistically significant.

Keywords: prevalence of anemia, knowledge, attitude, compliance, weekly iron folic acid supplementation programme, adolescents.

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