
Effectiveness of Adolescent Health Programme on knowledge regarding Iron deficiency anaemia among adolescent girls at Kabirdham District, Chhattisgarh

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Abstract

Adolescent period is a critical link between childhood and adulthood. Objectives of this study were to assess the effectiveness of adolescent health programme on knowledge regarding Iron deficiency Anaemia among adolescent girls and to associate the knowledge score with their selected demographic variables. An evaluative approach was used in the study, non-probability purposive sampling technique was used to select 120 adolescent girls from 60 adolescent girls from govt. higher secondary school and 60 from private higher secondary school and data was gathered using the structured knowledge questionnaire on iron deficiency anaemia. Data was analysed by using descriptive and inferential statistics in selected school. The study result showed that majority (76%) of study sample had poor knowledge, 2% had good knowledge and 22% had average knowledge on prevention of iron deficiency anaemia.

Keywords: Prevention, anaemia, Adolescent girls.

Introduction

Adolescence has been defined by WHO as the period of life span, the age between 10- 19 years. It is a formative period of life when maximum amount of physical, psychological and behavioural changes take place[1]. Adolescence is a critical stage, when health of the female is affected due to growth spurt, beginning of menstruation, poor intake of iron due to poor dietary habits which may lead to iron deficiency anaemia among the adolescent girls[2,4]. Findings from NFHS-3 (2005-06) indicate that 56% of the adolescent girls in India are anaemic and, of these 17% suffer from moderate to severe anaemia[3]. Almost 47 per cent of girls in the age group of 11 to 19 years are underweight in India, which is the highest in the world, a UNICEF report on the 'State of the World's Children' released here today said.

Also a total of 56 per cent of girls and 30 per cent of boys in the age group are anaemic which places the country along with the least developed African nations. The report says that around 25 per cent (243 million) of Indians belong to the age-group of 11-19 years[1]. It is widely prevalent in all age groups, nearly 58% in pregnant women, 50% among non-pregnant non-lactating women, 56% among adolescent girls, 30% in adolescent boys and around 80% in children under two years of age. The burden of anemia is a major contributor for low birth weight, lowered resistance to infection, poor cognitive and motor development, weakness, fatigue, difficulty in concentrating and lower productivity [7].

Objectives

- To assess the pre- test knowledge score on knowledge regarding iron deficiency anaemia among adolescent girls in selected schools of Kabirdham District, C.G.
- To assess the effectiveness Adolescent Health Programme on knowledge regarding iron deficiency anaemia among adolescent girls in selected schools of Kabirdham District, C.G.
- To associate the pre-test knowledge score regarding anaemia among adolescent girls and selected demographic variables.

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- To compare the pre and post-test knowledge score regarding iron deficiency anaemia among adolescent girls in selected Govt and Private higher secondary school of Kabirdham District, C.G.

Hypotheses: RH1: There is significant difference in pre and post -test knowledge score regarding iron deficiency anaemia among adolescent girls in selected schools of Kabirdham District, C.G.

RH2: There is significant association with pre- test knowledge score on knowledge regarding iron deficiency anaemia among adolescent girls and selected demographic variables.

Research Methodology:Setting: The study was conducted in one government and private state board (11th and 12thstandard)higher secondary schools, Kabirdham, Chhattisgarh.

- Research approach: The approach used for this study was Evaluative approach.
- Research design: Pre experimental Design.
- Sample: 120 Adolescent Girls.
- Sampling technique: non probability purposive sampling
- Inclusion criteria: Only female students. Adolescents who are willing to participate in the study.
- Exclusion criteria: Boy students
- Data collection instruments:
Demographic Data
Closed ended questionnaire
- Description of tool:

The tool consisted of two aspects: Section A: - A structured questionnaire to asses Socio demographic Performa of the study participants. Items on selected demographic variables like age, previous knowledge, etc

Section B: - Structured knowledge questionnaire to assess the knowledge on prevention of Iron deficiency anaemia.

Data Collection Procedure: The investigator obtained written permission from the Principals of schools. The investigator introduced him to the respondents to ascertain their cooperation for the study. Later, the investigator collected data from the samples after obtaining their consent from adolescent girls in selected government and private higher secondary schools. Girl students were selected through purposive sampling technique. The

Pre-test knowledge level was assessed by structured questionnaire. Then Adolescent health programme on knowledge regarding iron deficiency anaemia was given for girl students after pre-test. After seven days the post-test knowledge was assessed with the same tool. The data collection procedure was continued from

19/06.17 to 27/06.17. The collected data analysed by using descriptive and inferential statistics.

A evaluative approach and pre experimental research design was used for this study. The sample consisted of 120 adolescent girls who were studying in selected schools of Kabirdham district, Chhattisgarh. The study was conducted in one government and private state board (9th and 10th standard) higher secondary schools, Kabirdham, Chhattisgarh.

Results

A total of 120 (60 Govt. Higher secondary school + 60 private H.S.S.) adolescent girls were included in the study. The studies revealed that in Govt. school majority (53%) of girls were in the age group of 15-16 years, all were Hindu religion, regarding parental education 46% were primary school education, 57% of the parents were farmer, 86% belong to nuclear family, 63% were belong in urban area and 41% had family income 10,000 to 20,000/-.In pre- test 67% of adolescents girls had moderate knowledge 27% had poor knowledge and 6% had good knowledge about prevention and management of Anaemia in post- test 46% had moderate knowledge, 40% had good knowledge and 14% had poor knowledge regarding prevention and management of Anaemia. In Private school majority 47% of girls were in the age group of 16- 17 years, 98% were Hindu, 54 % father were educated up to high school 63% of the parents had business. 61% belong to joint family, 88% belong in urban area, 46% had family income 20,000 to 30,000. Among the sample who received the information regarding prevention of iron deficiency anaemia, 47% of adolescent girls had some knowledge from media and 45% from family and friends. In private higher secondary school in pre-test 56% had average knowledge, 26% had poor knowledge and 18% had good knowledge in post- test 40% had average knowledge, 54% had good knowledge, and 6% had poor knowledge. In Govt H.S.S. pre-test knowledge score with mean($X_1=7.14$) and standard deviation (2.86) and post-test knowledge score with mean ($X_2=12.08$) Standard deviation (1.29).The study shows a tremendous difference in the knowledge of subjects regarding selected aspects after the administration of structured teaching programme on knowledge on prevention on iron deficiency anaemia. Data depicts that the mean post- test knowledge score was higher than the mean pre -test knowledge score. The accepted t value is greater than the table value ($t=11.04$; $p<0.05$).The computed t value shows that there is a significant difference between the two mean

knowledge score. This indicates that structured teaching programme is effective in increasing the knowledge score of Girl students regarding prevention of iron deficiency anaemia. The mean pre- test knowledge score was 20.62 and mean post- test knowledge was 21 and SD was 3.37, which is higher

than mean pretest knowledge score and t value was 5.659 which was significant at the level of $P < 0.01$. and There is no association with pre-test knowledge score regarding iron deficiency anaemia among adolescent girls and selected demographic variables.

Table 1: Pre and Post-test knowledge score regarding iron deficiency anaemia among adolescent girls at govt & Private Higher secondary school, Kawardha

		Mean	N	Std. Deviation	Paired t - test value($P < 0.05$)
Pair 1	G.H.S.-pretest	7.14	60	1.29	11.04
	G.H.S.-post	12.08	60		

		Mean	N	Std. Deviation	Paired t-test value ($P < 0.01$)
Pair 2	P. H.S.S. Pre - test	20.62	60	3.37	5.659
	P.H.S.S. Post test	21	60		

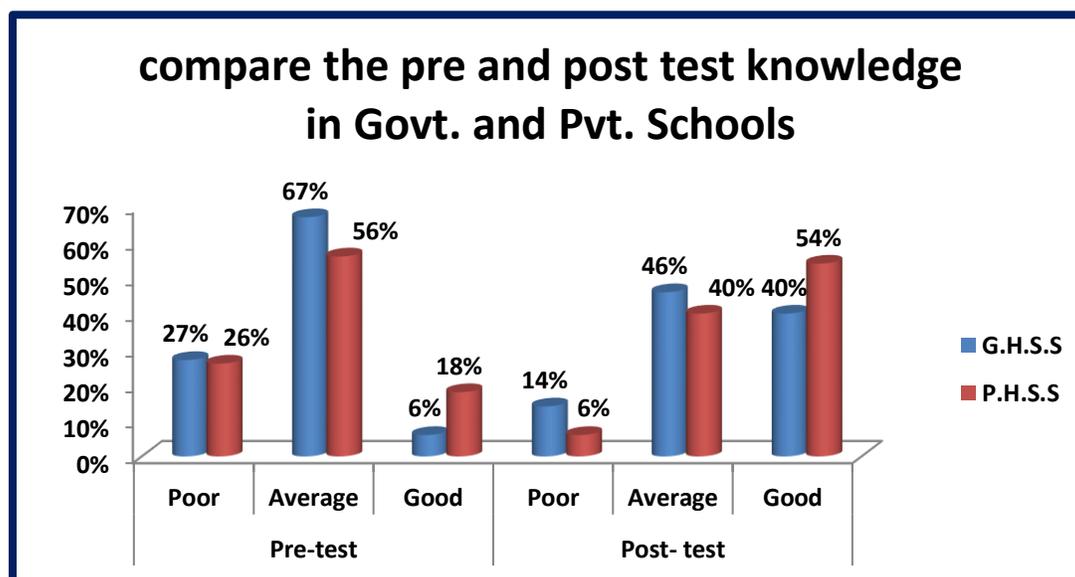


Fig. 1: Compare the pre and post test knowledge in Givt. and Pvt. Schools

Discussion

The reasons for the high incidence of anaemia among the adolescent girls are:

- Increased iron requirements because of growth
- Erratic eating habits, dislike for foods which are rich in iron, like green leafy vegetable
- Iron absorption inhibitors in food: phytates/tannins [6-8]

In this study Lack of accurate information, absence of proper guidance, parent's ignorance, lack of skills and insufficient services from health care delivery system

are the major barriers. Interventions should focus on providing psychological and mental health services and behaviour change communication towards leading a healthy lifestyle, awareness creation about prevention and management about Anaemia and to counsel the adolescent girls on nutrition and reproductive health. The present study, sisters and mothers and teachers were the major source of information. Therefore, there is a need for the provision of comprehensive family life education for the parents also.

Conclusion

The result from this study reveals that the knowledge on prevention of iron deficiency anaemia among girl

students was inadequate and moderately adequate. This has to be taken into consideration. There may be many reasons for Girl students' inadequacy, which can be improved upon. Educational programme is one of the effective methods in increasing the knowledge regarding prevention of iron deficiency anaemia among Girl students'. The findings of the study revealed a significantly increased in the post test knowledge scores after administration of Adolescent teaching programme.

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