

A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge of Iron Deficiency Anemia Among Adolescent Girls in Selected College of Uttarakannada.

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Abstract—A pre-experimental one group pretest post test design was used for the study. Sample consisted of 60 adolescent girls in selected college of Uttarakannada. The sample was selected by purposive sampling technique. A structured questionnaire was given to assess the knowledge regarding iron deficiency anemia among adolescent girls. Before data collection the researcher introduced the purpose of the study, clarifies the queries and took the verbal consent from the subjects. The result shown that mean percentage of posttest knowledge score (81.8%) was higher than the mean percentage score (42.7%). The calculated 't' value showed significant difference between mean pre and post-test knowledge scores. Calculated 'X²' values showed significant association between the demographic variables with their pretest knowledge scores at 0.05 level of significance. The study concluded that the STP is effective in increasing the knowledge of adolescent girls.

Indexed Terms— Iron Deficiency Anemia, Structured Teaching Program (STP), Purposive Sampling Technique, Adolescent girls,

I. INTRODUCTION

The World Health Organization (WHO) defines adolescence as the period from 10 to 19 years of 24 age. The worldwide prevalence of anemia among adolescents is 27% in developing countries and 6% 25 in developed countries. Anemia is a global public health concern affecting both developing and developed countries." It defines a condition in which the number of red blood cells (RBCs) and their oxygen-carrying capacity are insufficient to meet the body's physiological needs.¹ Anemia is a late indicator

of iron deficiency. It is estimated that iron deficiency is 2.5 times more common than anemia. In developing countries the estimated prevalence of anemia was in children below 5 years 39%, in children between 5 to 14 years 48%, in women 15-59 years 42%, in men 15-59 years 30% and in adults more than 60 years of age group 45%. These figures show the significant impact of anemia on economic and health consequences for middle and low income countries.² Anemia is generally recognized as the greatest nutritional problems among adolescents and diet is likely a major factor. In a review of 32 studies from developing countries the overall prevalence of anemia was the order of 27%.^{3,4} Changes in the educational system and improvement in the standards of education will increase the workload of students. This will increase the stress among adolescents. It will lead to meal skipping and gives a way to develop iron deficiency anemia which leads to impaired physical work, poor intelligent quotient, decreased motor and cognitive function.⁵ So, its important to educate all adolescent girls about iron rich foods, importance of iron intake and functions of iron in Human body.

II. OBJECTIVE OF THE STUDY

1. To assess the existing knowledge of Iron Deficiency Anemia among Adolescent girls.
2. To evaluate the effectiveness of structured teaching program of Iron Deficiency Anemia among adolescent girls.

- To find out the association between the pre-test knowledge scores with their selected demographic variables.

Hypothesis :

H₁: The mean post test knowledge score of adolescent will be significantly higher than their mean pre-test score.

H₂: There may be significant association between the pre-test level of knowledge of adolescent girls with their selected demographic variables.

III. CONCEPTUAL FRAMEWORK

For the present study Rosen Stock and Beckers health belief model (1978) adopted. Rosen Stock assumed that objective of the people to have good health added “positive health motivation” this model proposes that people will not attempt to adopt the preventive practices unless the complications are threatening to some aspect of their lives.

IV. METHODOLOGY

A pre-experimental One group pre-test post-test design was used for the study. The purposive sampling technique was used. A descriptive research design used to collect information within a given population having same characteristics of interest. The sample size consists of 60 adolescent girls who were fulfilling the inclusion criteria. Evaluative approach was adopted. A structured knowledge questionnaire was used to assess the knowledge and STP was provided to find its effectiveness. The group included only those study subjects who were present at the time of data collection.

V. RESULT AND ANALYSIS

Section I: Description of Demographic Data

In relation to age majority of the subject 50% were of age 17 years followed by 28.3% were of 16 years , 21.7% were of 18 years ; 70% were of studying in 11 standard, 30% were of studying in 12 standard.The classification of respondents by religion, type of family, food pattern is depicted in figure 2 reveals that 95% of the subject were muslim, 5 % were of Hindu. 81.7% were of living in joint family, 10% were of extended ,8.3% were of Nuclear. 66.7% were of taking

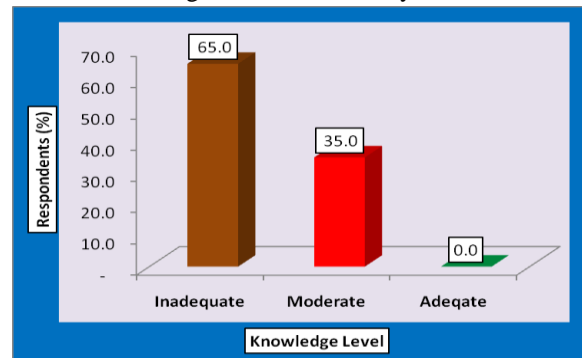
non vegetarian diet, 18.3% were of taking vegetarian diet, 13% were of taking mixed diet. The classification of Respondents by Source of information and History of Anemia is depicted in figure 3 reveals that 90% of the respondents were received information from Television,10.0% of the respondents were received from Newspaper. 66.7% of the respondents have history of anemia and 33.3% of the respondents no history of anemia. The classification of respondents by Educational Status of parents is depicted in figure 4 reveals that 63.4% of fathers have Primary education and 41.7% of mother have primary education. 40.0 % of mothers are illiterate 8.3% of fathers are Illiterate. 28.3% of fathers have higher secondary education, 6.6% of mother have higher secondary education. 0.0% of fathers are graduated, 11.7% of mothers are graduated.

Section II: Analysis of pre-test and post-test knowledge scores and effectiveness of structured teaching program

TABLE – 1 :Classification of Respondent Pre test Knowledge on Iron deficiency anemia :

Knowledge Level	Category	Respondents	
		Number	Percent
Inadequate	≤ 50 %Score	39	65.0
Moderate	51-75 % Score	21	35.0
Adequate	> 75 %Score	0	0.0
		60	100.0

Figure .1: Classification of Respondent Pretest Knowledge on Iron deficiency anemia.

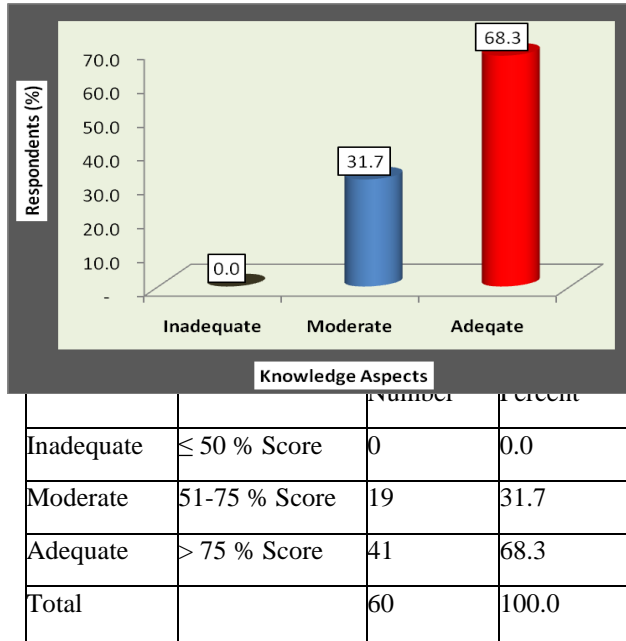


Data in table one shows that classification of respondent pre test knowledge on Iron Deficiency

Anemia is depicted in Figure 1, reveals that 65.0% have inadequate knowledge, 35.0% have Moderate knowledge and 0.0% have Adequate knowledge.

TABLE – 2 Classification of Respondent Post test Knowledge on Iron deficiency anemia:

Figure 2: The Classification Of Respondents Of Post Test Knowledge Level OnIron Deficiency Anemia.



post test knowledge level on iron deficiency anemia is depicted in Figure 6 reveals that 68.3% have Adequate knowledge, 31.7% have Moderate knowledge, 0.0% have Inadequate knowledge.

II. SECTION 3 – Association between demographic variables and pretest knowledge level on road safety measure.

Association of pre-test level of knowledge of study participants and their selected socio-demographic variable and calculated χ^2 values. The calculated χ^2 values with regard to all the selected socio demographic variables viz. Age ($\chi^2=6.70^*$), Sex($\chi^2=7.11^*$), Class ($\chi^2=3.90^*$), Type of family ($\chi^2=7.11^*$), food pattern ($\chi^2 =20.58^*$), History of anemia ($\chi^2 =5.28^*$)were more than the table value at 0.05 level of significance which indicates that there is a significant association between pre-test knowledge

scores and Demographic Variables, hence the stated research hypothesis H2 is accepted with regard to above mentioned demographic variables. but the calculated χ^2 values with regard to Religion ($\chi^2=1.39$), source of information ($\chi^2=0.04$), Mother’s education ($\chi^2=4.22$), and Father’s education ($\chi^2=2.27$), were less than the table values at 0.05 level of significance which indicates that there is no significant association between post-test knowledge score and the demographic variables. hence the stated research hypothesis H2 is rejected with regard to these demographic variables.

VI. DISCUSSION

The major findings of the study and discusses them in relation to the findings of other research studies. The study intended to assess the effectiveness of structured teaching program on the knowledge regarding iron deficiency anemia among adolescent girls in selected college of Uttara kannada. The overall experience was a satisfying one. The investigator found that structured teaching program was an effective teaching strategy to improve knowledge of iron deficiency anemia among adolescent girls in selected college of Uttara kannada.

The study findings can be supported by the Study was conducted to assess the effectiveness of structured teaching program on knowledge regarding prevention and prevalence of anemia among adolescent girls in selected area, Mohali. The sample consist of 100 adolescent girls. The sample is collected through purposive sampling technique. The data is collected by socio demographic questionnaire and self instructional module. The result shows that all demographic variables are not significant at 0.05 levels except type of residence ($\chi^2=25.951$, $df=6$) which is significant at 0.05 level. Thus, it can be inferred that there is significant association between knowledge levels of adolescent girls regarding prevention and prevalence of anemia and demographic variables. Therefore, the hypothesis stated there will be significant association between pre-test knowledge level of adolescent girls regarding prevention and prevalence of anemia and selected demographic variables is accepted.⁶

CONCLUSION

The study significantly proved that there is a remarkable improvement in the knowledge of adolescent girls regarding iron deficiency anemia after structured teaching program. There was no significant association between Religion, source of information, Mother's education, and Father's education with regards to Iron deficiency anemia ($P < 0.05$), where as there was an association between Age, Sex, Class, Type of family, food pattern, history of anemia.

SUMMARY

The researcher felt a deep sense of satisfaction and fulfillment for having undertaken the study. The study provided the investigator with deeper insight and empathy to the training needs of adolescent girls about iron deficiency anemia. The expert opinions, help from college staffs and cooperation from participants made the study fruitful and interesting. The study revealed that STP could be used as an effective teaching strategy.

RECOMMENDATIONS

Keeping in view of the findings of the present study; the following recommendations were made:

1. A similar study can be conducted on a large population.
2. An experimental study can be conducted to determine the effectiveness of planned teaching programme for adolescent girls regarding prevention and management of iron deficiency anemia.
3. A similar study can be conducted among pregnant women.

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