

**AESSESS THE EFFECTIVENESS OF STRUCTURES TEACHING PROGRAMME
ON KNOWLEDGE REGARDING PREVENTION OF ANEMIA AMONG
ADOLESECENT GIRLS IN URBAN AREA**

Aadil Kadiwala

*Assistant professor, Department of Community Health Nursing,
Sumandeep Nursing College,
Sumandeep Vidyapeeth deemed to be University,
Piparia, Waghodia, Vadodara - 391760, Gujarat, India*

ABSTRACT

BACKGROUND:Anemia is a condition in which the number of red blood cells or the amount of hemoglobin is low. RBC contains hemoglobin, proteins that it enables them to carry oxygen from the lungs and liver to all parts of the body when the number of RBC is reduce or the amount of hemoglobin in them is low the blood cannot carry an adequate supply of oxygen and inadequate supply of oxygen in tissue produce the symptoms of anemia. Anemia affects about 2 billion people worldwide. Inadequate iron intake is the primary cause of anemia, and contributes to 22 percent of maternal deaths and 24 percent of prenatal deaths. Anemia in childhood irreversibly compromises cognitive development, leading to lower school attainment and losses in productivity. Thus, correcting Anemia of any severity can have an impact on and child survival.

OBJECTIVES: To assess the pre-test knowledge score regarding prevention of anemia among adolescent girls. To administer structure teaching program on prevention of anemia among adolescent girl. To assess the post-test knowledge of adolescent girls.

METHODS: In this research study a quantitative research approach with Pre-experimental one group pre-test post-test research design is used. The sampling techniques was non probability convenient sampling is used to collect the 100 samples of adolescents girls and data collection done by structured knowledge questionnaire with descriptive and inferential

statistical analysis.

RESULTS: In present study shows that in pre-test finding among 100 Adolescent girls, 2 (6.67%) adolescent girls had good knowledge, 18(60%) adolescent girls had average knowledge and 10 (33.33%) had poor knowledge. In post-test finding The findings of the study revealed that among 100 adolescent girls, 4(13.33%) adolescent girls had excellent knowledge, 14(46.67%) adolescent girls had good knowledge and 12 (40%) had average knowledge. post-test knowledge scores were significantly higher than the mean pre-test knowledge scores .Hence it full filled objective no.3 and Rh1 was accepted.

INTRODUCTION

Anemia is a condition in which the number of red blood cells or the amount of hemoglobin is low. RBC contains hemoglobin, proteins that it enables them to carry oxygen from the lungs and liver to all parts of the body when the number of RBC is reduce or the amount of hemoglobin in them is low the blood cannot carry an adequate supply of oxygen and inadequate supply of oxygen in tissue produce the symptoms of anemia.

Anemia affects about 2 billion people worldwide. Inadequate iron intake is the primary cause of anemia, and contributes to 22 percent of maternal deaths and 24 percent of prenatal deaths. Anemia in childhood irreversibly compromises cognitive development, leading to lower school attainment and losses in productivity. Thus, correcting Anemia of any severity can have an impact on and child survival.

Adolescents constitute about 25% of the population and form an important physiological group whose nutritional needs demand special attention. Adolescence is a period of rapid growth, weight gain and blood volume expansion. The overall iron requirement of the body increases during this period. During adolescent period, the risk of iron deficiency and anemia among boys and girls appears to be more due to growth spurt, and in girls it remains as such during their reproductive life. Iron deficiency is the most widespread form of malnutrition among women and children. In India, anemia affects an estimated 50% of the population. Numerous studies among adolescent girls have shown that the prevalence of

anemia is very high.

Adolescent has been defining by the WHO as the period of life spanning the age between 10 to 19 year (WHO, 2017). This is the formative period of life when the maximum amount of physical, psychological and behavioral changes take place. That is vulnerable period in the life cycle for the development of nutritional anemia. Which has been constantly neglected by public health programme during adolescent anemia is estimated to be the greatest nutritional problem. Anemia is widely prevalent in India and affects both sexes and all age groups.

In India, pre-adolescent and adolescent girls, who constitute a sizable segment of its population, constitute a vulnerable group on account of the practice of early marriages and potential exposure to a greater risk of morbidity and mortality. Adolescence is a crucial developmental period. In adolescent girls on a marginal diet, iron deficiency may be a routine consequence of growth and skeletal development. Further, low iron stores throughout childhood may contribute to a delayed menarche and impaired immuneresponse.

India has one of the fastest growing youth populations in the world, with an estimated 190 million adolescents. Girls below 19 years of age comprise one quarter of India's rapidly growing population. The majority is out of school and has limited choices available for the future. Girls are caught in the cycle of early marriage, repeated pregnancy and poverty.

Anemia in adolescent & young adult can have negative effect on their cognitive performance & growth at all level the negative effects of anemia during adolescents justify public health action, unfortunately because initiatives to prevent anemia commonly target infants, young children & pregnant & lactating women and not necessarily adolescent the need of adolescents. May remain unmet & consequences of anemia in adolescents. Iron deficiency anemia is serious public health concern in most developing countries.

MATERIALS & METHODS

In this study, Pre-experimental one group pre-test post-test research design is used for this

study. Sample is the representative part of the population, in this study samples 100 adolescent girls who were selected as a sample by using non-probability convenient sampling technique. The tool for data collection was consist of two parts. The first part was demographic variables such as age, gender, education qualification of adolescent girl, experience of girls & previous participation in any continuous school education programme on iron deficiency. The second part was self-administering questionnaires to assess knowledge of adolescent girl on iron deficiency. Data is analyzed by using descriptive and inferential statistics such as median, frequencies and calculated t value, chi-square test.

FINDINGS:

Section – 1: Knowledge of adolescent girls regarding iron deficiency anemia in pre test.

TABLE 4.2: Mean and standard deviation of the knowledge of the Adolescent Girls regarding Iron Deficiency Anemia.

SR. NO.	AREAS	NO OF QUESTIONS	MEAN	MEAN PERCENTAGE	STANDARD DEVIATION
1	Importance of iron rich diet	11	4.9	44.54545	1.66816
2	Soft and liquid diet	6	2.966667	49.44444	0.889918
3	Low fat and low sodium diet	10	3.866667	38.66667	1.696514
4	High protein and low CHO diet	6	3.433333	57.22222	0.935261
5	Low protein and high fiber rich diet	7	2.833333	40.47619	1.341212
6	Overall	40	18	45	3.695291

The knowledge about importance of iron deficiency anemia .the mean value was 6.6 and the standard deviation was 1.66. Knowledge of soft and liquid diet the mean value was 2.96 and standard deviation 0.889. Knowledge of low fat and low sodium diet the mean value was 3.43 and standard deviation was 1.69. Knowledge of high protein and low CHO diet the mean value was 3.43 and the standard deviation was 0.93. Knowledge about low protein & High fibre diet the mean was 2.83 and standard deviation was 1.34.

TABLE 2: Mean and standard deviation of the knowledge of the adolescent girls regarding anemia in Post-test.

SR. NO	AREAS	NO OF QUESTIONS	MEAN	MEAN PERCENTAE	STANDERD DEVIATION
1	Impotance of iron rich diet	11	6.6	60	1.452703
2	Soft and liquid diet	6	3.9	65	1.09387
3	Low fat and low sodium diet	10	4.666667	46.66667	1.268541
4	High protein and low CHO diet	6	3.633333	60.55556	1.033352
5	Low protein and high fiber rich diet	7	2.933333	41.90476	1.172481
6	Overall	40	21.73333	54.33333	3.423381

In this study overall mean value in post-test was 21.73333 with standard deviation was 3.423381. In first knowledge about iron deficiency anemia the mean value was 6.6 and the standard deviation was 1.45. Knowledge about soft & liquid the mean value was 3.9 and standard deviation was 1.09. Knowledge about low fat & low sodium diet the mean value was 4.6 and standard deviation was 1.26. Knowledge about high protein & low CHO diet the mean value was 3.63 and the standard deviation was 1.03. Knowledge low protein & high fibre diet the mean value was 2.09 and standard deviation was 1.17.

TABLE 3: Comparison of pre-test and post-test knowledge scores regarding iron deficiency anemia.

SR.NO	ASPECTS	CALCULATED “T VALUE”	TABLEVALUE “T”
1	Importance of ironrichdiet	7.39	2.05
2	Soft and liquid diet	7.15	2.05
3	Low fat and lowsodium diet	9.05	2.05
4	High protein andlow CHO diet	1.33	2.05
5	Low protein andhigh fiber rich diet	0.55	2.05
6	Overall	12.85	2.05

Table 3 the gain in mean for knowledge aspects with, calculated “t” value 12.85 was greater than table value 2.05 at df 29 was highly significant. The findings reveal that the overall mean post and pre-test knowledge scores was higher than mean pre-test knowledge scores. So the hypothesis H1 was accepted.

DISCUSSION

In present study shows that in pre-test finding among 100 Adolescent girls, 2 (6.67%) adolescent girls had good knowledge, 18(60%) adolescent girls had average knowledge and 10 (33.33%) had poor knowledge. In post-test finding The findings of the study revealed that among 100 adolescent girls, 4(13.33%) adolescent girls had excellent knowledge, 14(46.67%) adolescent girls had good knowledge and 12 (40%) had average knowledge.

In Similar study shows that a significant percentage of adolescents in the developing world are anemic, causing considerable health consequences for this age group. About 27% of adolescents are estimated to be anemic in developing countries, compared to 6% in developed countries. Regional figures,although varying by country within the region, suggest the following prevalence rates for Anemia In Africa, 45% ,In Oceania, 45% ,In Latin America and the Caribbean, 12% for girls ,In Asia, 19% for girls. In another studies conducted by the International Centre for Research on Women, country findings on adolescent Anemia among

both males and females include: High rates of Anemia in Nepal (42%), India (55%), and Cameroon (32%) Moderate rates in Ecuador (17%) and Jamaica(16%).

Effectiveness of structure teaching programme regarding prevention of anemia:

Mean pre-test knowledge score of School girls were 10.1 which increase to 17.26 at post-test. Study shows that planned teaching programme was efficacious in increasing the level of knowledge of School girls regarding prevention of anemia. In the present study the mean post-test knowledge scores were significantly higher than the mean pre-test knowledge scores .Hence it full filled objective no.3 and Rh1 was accepted.

In India, pre-adolescent and adolescent girls, who constitute a sizable segment of its population, constitute a vulnerable group on account of the practice of early marriages and potential exposure to a greater risk of morbidity and mortality. Adolescence is a crucial developmental period.

CONCLUSION:

The study attempted to find out effectiveness of structured teaching programme on prevention of anemia among adolescent girls,NalandaVidhayalay, Prantij. Total sample 100 Adolescent girls were selected for the study. Pre-test was conducted among 100 Adolescence girls and after 2 days structured teaching programme was given to them. Post-test of the Adolescence girls was taken after 7 days of pre-test. Results revealed that structured teaching programme was effective in enhancing the knowledge of Adolescence girls regarding prevention of anemia.

CONFLCTS OF INTEREST

The authors declare that they have no conflict of interest.

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