

EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE OF ANEMIA AMONG STUDENTS OF B.SC NURSING I YEAR

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Abstract

The study was aimed to evaluate the effectiveness of structured teaching programme on knowledge of anemia among students of B.Sc nursing I year. Study was conducted using pre experimental, one group pretest- posttest design among 30 students (Between 17-24 years) at B.Sc Nursing I year students, Hind College of Nursing, Safedabad, Barabanki, U.P. Samples were selected using Non-probability-Convenient sampling technique. Data was collected using structured questionnaire- Section A containing demographic variables and Section-B containing 20 questions for assessing the knowledge level of samples. Study findings revealed that, there was significant difference between the pretest and posttest level of knowledge of anemia among experimental group t- value is 12.63 (df is 29) and P value 0.001. It indicated that, statistically significant improvement in the knowledge of anemia following the administration of structured teaching programme among students of B.Sc Nursing I year.

Keywords: Effectiveness, Structured Teaching Programme, Knowledge of anemia.

Introduction:

“Health is the Greatest Gift, Contentment the Greatest Wealth, Faithfulness the Best Relationship”

Anemia is a condition characterized by reduction in the number of red blood cells and hemoglobin concentration. Anemia is a global public health problem affecting both developing and developed countries and has major consequences for human health as well as social and economic development. It affects 24.8% of the world population. The burden of anemia varies with a person age, sex, altitude, and pregnancy. The worldwide prevalence of anemia among adolescents is 15% (27% in developing countries and 6% in developed countries).

Causes of anemia in developing countries are multi factorial, which include nutritional (iron, folate, and vitaminB12) deficiencies, infections (such as malaria and intestinal parasites) and chronic illness. Iron deficiency anemia and subsequent anemia increases at the start of adolescence. In girls, this is caused by increased requirements of nutrition for growth, exacerbated a few years later by the onset of menstruation, but subsides for boys. The physical and physiological changes that occur in adolescents place a great demand on their nutritional requirements and make them more vulnerable to nutritional deficiencies.

Prevalence is a statistical concept referring to the number of cases of a disease that are present in a particular population at a given time. India has the highest total prevalence of anemia at 39.86% and Globally, anemia affects 1.62 billion people which corresponds to 24.8% of the population. The highest prevalence is in preschool-age children, and the lowest prevalence is in men.

Adolescents are at high risk of iron deficiency anemia; this is due to rapid pubertal growth with sharp increase in lean body mass, which increases iron requirements for myoglobin in muscles and HB in the blood. Iron requirement increases two to threefold from a preadolescent level of 0.7-0.9 mg iron/day to as much as 1.37-1.88 mg iron/day in adolescent boys and 1.40-3.27 mg iron/day in adolescent girls. During adolescence, the continuous increase in median requirement for absorbed iron peaks between the ages of 14–15 years for girls and 1 to 2 years later for boys.

Anemia in adolescence has serious implications for a wide range of outcomes, and nearly all of the functional consequences of iron deficiency are strongly related to the severity of anemia. It causes reduced resistance to infection, impaired physical growth and mental development, and reduced physical fitness, work capacity, and school performance.

Interventions to reduce the burden of anemia and iron deficiency anemia should address the causatives. Cost effective anemia prevention and control strategies are well documented and have the power for their intended objectives in different countries. Knowledge of the degree and causes of anemia in adolescence is important, as this is a window of opportunity for school based interventions to improve adolescent health. There is scarcity of data on anemia in adolescents living in developing counties in the complex ecologic context of poverty, parasitism, and malnutrition.

It is therefore recommended that adolescent girls must be screened to detect and check the influencing factor of anemia. The high risk adolescent girls need to be considered for close follow ups for modification of risk factors. They must be advised on life style changes by means of proper diet, self-care, regular exercise and weight gain. Appropriate health education need to be imparted at home and school so that these risk factors can be eliminated in early stages itself. Health-care professionals and policy makers should play a key role prioritizing the plan of action in the prevention of anemia and its related risk factors. The ultimate challenge is to meet the goal and to reach the global nutrition targets of 50% reduction of anemia in women of reproductive age. In the long run these measures will meaningfully contribute to develop nations' economic growth, health, wealth and well-being.

Statement of the problem:

A study to assess the effectiveness of Structured Teaching Programme on knowledge of anemia among students of B.Sc Nursing I Year at Hind College of Nursing, Safedabad, Barabanki.

Objectives of the study:

- To assess the pre-test level of knowledge of anemia among students of B.Sc. nursing I year at Hind College of Nursing.
- To assess the effectiveness of structured teaching programme on knowledge of anemia among students of B.Sc. nursing I year at Hind College of Nursing.
- To evaluate the association between post-test levels of knowledge of anemia in relation to demographic variables among students of B.Sc. nursing I year at Hind College of Nursing.

Hypotheses:

H_1 : There will be significant difference in pre-test and post-test level of knowledge of anemia among students of B.Sc. nursing I year.

H_2 : There will be an association between the post-test levels of knowledge of anemia among students of B.Sc. nursing I year with demographic variables.

Research Methodology:

Study was conducted using pre experimental, one group pre-test- post-test design among 30 students (Between 17-24 years) at B.Sc Nursing I year students, Hind College of Nursing, Safedabad, Barabanki, U.P. Samples were selected using Non-probability-Convenient sampling technique. Data was collected using structured questionnaire- Section A containing demographic variables and Section-B containing 20 questions for assessing

the knowledge level of samples (Inadequate knowledge being a score of 1-7, moderate knowledge is a score of 8-14 and adequate knowledge is a score of 15-20). The validity of the tool was evaluated by the experts in the field of nursing and reliability of the tool was established by split half method with the $r=0.7$, which shows that the tool was highly reliable.

Results and discussion:

TABLE- 1: Percentage of pre-test and post-test level of knowledge of anemia among experimental group

Knowledge level	Pre test		Post test	
	Frequency	%	Frequency	%
Inadequate knowledge	5	16.7	0	0
Moderate knowledge	24	80	20	66.7
Adequate knowledge	1	3.3	10	33.3

Table 1 reveals that

In pre-test, 5 subjects (16.7%) had inadequate knowledge of anemia, 24 subjects (80%) had moderate knowledge of anemia and 1 subject (3.3 %) had adequate knowledge in the experimental group.

In post-test, 0 subject (0.0 %) had inadequate knowledge of anemia, 20 subjects (66.7%) had moderate knowledge of anemia and 10 subjects (33.3%) had adequate knowledge in the experimental group.

TABLE- 2: Difference between the pre-test and post-test level of knowledge of anemia among experimental group

	N	Mean	SD	SE	t- value	dF	Sis (P) value
Pre-test	30	10.17	2.6	0.47	12.63	29	0.001*
Post-test	30	13.97	1.9	0.35			

Table 2 reveals that there is significant difference between the pre-test and post-test level of knowledge of anemia among experimental group.t- value is 12.63 (dF is 29) and P value 0.001.

TABLE-3: Association between post-test levels of knowledge of anemia in relation to age among experimental group

Age	\leqMedian	>Median	X^2	dF	Sis (P) Value
17-20 years	13	13	0.001	1	1
21-24 years	2	2			

Table 3 reveals that there is no association between post-test levels of knowledge of anemia in relation to age among experimental group. X^2 - 0.001 (dF-1) and P value is 1.

TABLE-4: Association between post-test levels of knowledge of anemia in relation to Gender among experimental group

Gender	\leqMedian	>Median	X^2	dF	Sis (P) Value
Male	7	7	0.001	1	1
Female	8	8			

Table 4 reveals that there is no association between post-test levels of knowledge of anemia in relation to gender among experimental group. X^2 - 0.001 (dF-1) and P value is 1.

Conclusion:

The study findings proved that structured teaching programme helps to improve the knowledge level of anemia among students of B.Sc. Nursing I year at Hind college of nursing. There was no association between post-test levels of knowledge of anemia with demographic variables such as age and gender among the experimental group.

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