

A Study to Evaluate Effectiveness of Planned Teaching Programme on Knowledge Regarding Anemia among Adolescent Girls at Madhav Saraswati Vidya Mandir Kanpur, U.P.

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ABSTRACT

Anemia or anaemia is a blood disorder in which the blood has a reduced ability to carry oxygen due to a lower-than-normal number of red blood cells, a reduction in the amount of hemoglobin or hemoglobin abnormalities. Title of the study was “A study to evaluate effectiveness of planned teaching programme on knowledge regarding anemia among adolescent girls at madhav saraswati vidya Mandir Kanpur,U.P.” Objectives of the study was to assess the pretest knowledge regarding anemia among adolescent girls in a selected school Kanpur Nagar, to assess the post-test knowledge regarding anemia among adolescent girls in a selected school Kanpur Nagar, to assess the effectiveness of planned teaching programme on knowledge regarding anemia among adolescent girls in a selected school Kanpur Nagar, to find out the association between posttest knowledge scores with their selected demographic variables. Methodology adopted for the study was quantitative research approach with a pre-experimental one group pretest and posttest was adopted. In this study, the sample consists of 60 adolescent girls who fulfilled the inclusion criteria for the study. The convenience sampling technique was used for this study. A structured Socio demographic variables and Knowledge questionnaire on anemia were selected based on the objectives of the study. The tools are prepared in three sections. Section A was socio- demographic data, and the Section –B was Knowledge questionnaire on Anemia. Validity of the tool was established with experts. Pilot study was conducted on adolescent girls from 05-04-2023 to 20-04-2023 to assess the tools feasibility and it was found to be feasible to collect the required information. For the main study the data collected from 03-05-2023 to 25-05-2023 from adolescent girls who fulfilled the inclusion criteria. The collected data was tabulated according to various parameters and the complete analysis was done with descriptive and inferential statistics. The study concluded that the positive impact of the program underscores the importance of targeted educational interventions in addressing health-related issues among young individuals. By promoting knowledge, awareness, and empowerment, such programs play a vital role in shaping the health outcomes of adolescent girls and empowering them to lead healthier lives.

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KEYWORDS: Anemia Adolescent Structure Teaching Programme

Need for the study: -

According to the World Health Organization (WHO), anaemia is a disorder in which the number or haemoglobin concentration of red blood cells is below normal which subsequently results in the decreased oxygen-carrying capacity of blood. Haemoglobin is an iron-containing protein in the red

blood cells (RBC) that transports oxygen from the lungs to the tissues and carries carbon dioxide from tissues back to lungs. Nutritional deficiencies, particularly iron deficiency is the main reason behind this disease although deficiencies in vitamins B9, B12 and A may also cause anaemia. Acute and chronic

infections, and genetic haemoglobin disorders are also found to lead to anaemia. Although the degree to which anaemia in a population can be attributed to these causes varies across populations. Despite great breakthroughs in science and healthcare, anaemia continues to be a significant global public health issue. Every fourth person in the world (27%) has anaemia, with the developing countries alone accounting for more than 89% of the burden. Although anaemia is a condition that affects all age groups, it is more common among pregnant women and children. Therefore, there have been global efforts to reduce anaemia among adolescent girls and boys, and women of reproductive age (WRA), especially pregnant and lactating women. Reducing anaemia among WRA by 50% is one of the prime 20 goals in six global nutrition targets for 2025 endorsed by WHO and putting an end to all forms of malnutrition has been listed as one of the targets of the Sustainable Development Goal (SDGs). Developing countries like India have also made continuous efforts to reduce the anaemia among children and women. However, as suggested by the Global Nutrition Report (2021), there has been little progress in combatting anaemia and malnutrition since 2016. It is also evident in India's rank (94th among 107 countries) in the recently published Global Hunger Index. Moreover, none of the programs and interventions have addressed anaemia among men, even though one in every four men in India suffer from anaemia.

Objectives

1. To assess the pretest knowledge regarding anemia among adolescent girls in a selected school Kanpur Nagar.
2. To assess the post-test knowledge regarding anemia among adolescent girls in a selected school Kanpur Nagar.
3. To assess the effectiveness of planned teaching programme on knowledge regarding anemia among adolescent girls in a selected school Kanpur Nagar.
4. To find out the association between posttest knowledge scores with their selected demographic variables.

Material and method:-

Research approach and design: - Quantitative approach with pre experimental one group pretest post-test design was adopted.

Setting of the study: - Madhav Saraswati Vidya Mnadir Kanpur, U.P.

Study population: - adolescent girls.

Accessible population: - Adolescent girls studying in Madhav Saraswati Vidya Mandir Kanpur U.P.

Sample size: - 60

Sampling technique: - Non probability convenient sampling technique.

Inclusive criteria:

1. Who were between the age of 10-17 years
2. Who were willing to participate
3. Who knows to read and write Hindi or English.

Exclusion criteria

1. Who was not available at the time of data collection.
2. Who have already attended this type of study.

Variables under study

Independent variable: The planned teaching programme is the independent variable.

Dependent variable: The knowledge among adolescent girls is the dependent variable.

Demographic variables: - The demographic variables are age in years, education, mothers' education, fathers' education, mothers' occupation, fathers' occupation, family income per month, family history of Anemia and source of information regarding Anemia.

Description of Tools

A Socio demographic variables and Knowledge questionnaire on Anemia was constructed by the investigator which contains items in the following aspects.

Section – A: Socio- demographic data consist of 6 items such as age in years, education, mothers' education, fathers' education, mothers' occupation, fathers' occupation, family income per month, family history of Anemia and source of information regarding Anemia.

Section – B: The Knowledge questionnaire on Anemia consists of 30 items.

Scoring for Knowledge questionnaire on Anemia.

Minimum score = 0

Maximum score = 30

Data collection procedure: -

For the main study the data collected from 03-05-2023 to 25-05-2023 from adolescent girls who fulfilled the inclusion criteria. The investigator distributed knowledge questionnaire along with demographic variables and after filling the questionnaire investigator collected it and provided Structured teaching program on anemia among the participants. After 1 week investigator conducted the posttest among the same participant to assess the level of knowledge they retain after STP on anemia.

Limitations of the study

1. Only 60 samples are used for this study.
2. Only samples form selected schools from Kanpur

Analysis and interpretations**Section I:- Base line characteristics of participants.****Table 1: - Baseline characteristics of the participants**

Sl.no	Demographic variables	frequency	percentage
1.	Age in years		
	10-11 years	12	20
	12-13 years	16	26.7
	14-15 years	14	23.3
2.	16 to 17 years	18	30
	Education qualifications		
	5 to 6	9	15
	7 to 8	10	16.7
3.	9 to 10	21	35
	11 to 12	20	33.3
	Mother's education		
	No formal education	6	10
	Primary education	14	23.3
	Elementary education	12	20
4.	High school	11	18.3
	Higher secondary education	10	16.7
	graduation	7	11.7
	Father's education		
	No formal education	3	5
	Primary school	17	28.3
5.	Elementary school	15	25
	High school	10	16.7
	Higher secondary school	9	15
	graduate	6	10
	Mother's occupation		
	Home made	13	21.7
6.	Private job	21	35
	Government job	16	26.7
	Self employed	10	16.7
	Father's occupation		
7.	Unemployed	5	8.3
	Private job	31	51.7
	Government job	14	23.3
	Self employed	10	16.7
8.	Monthly income of family		
	<=5000 rs	9	15
	5001-7500	11	18.3
	7501-10,000	23	28.3
9.	>10000	17	28.3
	Family history of Anemia		
9.	Yes	19	31.7
	No	41	68.3
	Sources of information		
	Mother	13	21.7
	Relative	10	16.7
9.	Friends	15	25
	Mass media	6	10
	Teachers	16	26.7

Section II: - Effectiveness of STP on anemia**Table no 2: - Effectiveness of STP on Anemia.**

Knowledge level	Inadequate	Moderate	Adequate
Pre test	29	24	07
Post test	03	06	51

Paired t test used to assess the effectiveness of STP on knowledge regarding anemia and the obtained value was 8.22 and the table value was 1.68 at 0.05 level of confidence. Since the obtained value greater than the table value STP was effective So, the H1 hypothesis was accepted. The investigator concluded the structured teaching programme was effective.

Assess the association between post test knowledge score with selected demographic variables.

Table no: - 3 chi square showing association between post test knowledge with selected demographic variables.

Sl.no	Demographic variables	mean		Obtained value	Table value	Inferences
		<=mean	>mean			
1.	Age in years			1.51	7.18	NS
	10-11 years	6	6			
	12-13 years	11	5			
	14-15 years	7	7			
2.	Education qualifications			10.58	7.18	S
	5 to 6	6	3			
	7 to 8	5	5			
	9 to 10	12	9			
3.	Mother's education			18.17	11.07	S
	No formal education	2	4			
	Primary education	12	2			
	Elementary education	5	7			
	High school	8	3			
	Higher secondary education graduation	5	5			
4.	Father's education			2.65	11.07	NS
	No formal education	3	0			
	Primary school	9	8			
	Elementary school	9	6			
	High school	5	5			
	Higher secondary school graduate	7	2			
5.	Mother's occupation			3.40	7.18	NS
	Home made	5	8			
	Private job	12	9			
	Government job	11	5			
6.	Father's occupation			1.59	7.18	NS
	Unemployed	2	3			
	Private job	20	11			
	Government job	7	7			
7.	Monthly income of family			8.11	7.18	S
	<=5000 rs	7	2			
	5001-7500	8	3			
	7501-10,000	14	9			
>10000	6	11				

8.	Family history of Anemia					
	Yes	13	6	1.16	3.84	NS
No	22	19				
9.	Sources of information					
	Mother	10	3	2.19	9.48	NS
	Relative	6	4			
	Friends	8	7			
	Mass media	3	3			
Teachers	8	8				

The chi-square calculation explains that there was a significant association between posttest knowledge level and the sociodemographic variables such as Education, Mother's education and the monthly income per month as the chi-square value was greater than the table value at 0.05 level of significance.

Conclusion: -

The study concluded that the positive impact of the program underscores the importance of targeted educational interventions in addressing health-related issues among young individuals. By promoting knowledge, awareness, and empowerment, such programs play a vital role in shaping the health outcomes of adolescent girls and empowering them to lead healthier lives.

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