

A Study to Assess the Knowledge Regarding Anaemia and its Management among Adolescent Girls in Selected Schools of Lucknow with a View to Develop an Information Booklet

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ABSTRACT

Adolescence is a critical stage in the life cycle, when the health of females is affected due to growth spurt, beginning of menstruation, poor intake of iron due to poor dietary habits and gender bias. Iron deficiency anaemia affects over 60% of the adolescent girls in India. Anaemia in adolescent girls has far-reaching implications. The anaemic adolescent girls grow into adult women with compromised growth, both physical and mental. These women have low pre-pregnancy weight and are more likely to die during childbirth and deliver low birth weight babies. **Objectives** –The main objective was to assess the existing level of knowledge regarding anaemia and its management among adolescent girls. **Methodology**- A quantitative research approach and a non-experimental descriptive research design was used. The sample size of 135 adolescent girls were selected by using non-probability convenience sampling technique. Initially the investigator got permission from concerned authority of Shia girls College Lucknow. The written consent was obtained from sample. The tools used were, Performa of demographic variables, structured knowledge questionnaire. Assessment of preexisting level of knowledge done by administering structured knowledge questionnaire after that information booklet was distributed. **Result**-The result of the study revealed that there was majority of the 48.9% sample subjects had inadequate level of knowledge, 32.6% had moderate level of knowledge and 18.5% had adequate level of knowledge.

KEYWORDS: Anaemia and its management, information booklet, anatomy and physiology of blood

INTRODUCTION

Health is a fundamental human right and health is central to the concept of quality of life (Sundar Lal, 2007). It is a general Condition of a person in all aspects and also it is a resource for everyday life. Health is a positive concept Emphasizing social and personal resources as well as physical capacities. Adolescent is a period of second decade of life and constitute over one fifth of India's population.

Adolescence begins when the secondary sex characteristics appear and ends when somatic growth is completed and the individual is psychologically mature, capable of becoming a contributing member of society.

Adolescents is a stage of transition from childhood to adulthood and is marked by the termination of the

childhood at one end and the beginning of adulthood at the other end. The adolescent is yet not free from the secure environment of the childhood yet heading towards achieving adulthood which is unknown.

The adolescent is neither down the stairs nor up the stairs. It is in between and there is no specific status which may be a source of problem if proper handling is not done and proper care is not given.

NEED FOR STUDY

Adolescence is the time when many developments take place both physically and mentally. In this period more nutritious and healthy diet is needed. During adolescence increased iron is needed for the body for the expansion of blood volume and increases muscle

How to cite this paper: Ms. Yashika Mishra | Mrs. Anjali Chaturvedi "A Study to Assess the Knowledge Regarding Anaemia and its Management among Adolescent Girls in Selected Schools of Lucknow with a View to Develop an Information Booklet"

Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-9 | Issue-2, April 2025, pp.850-854,

URL: www.ijtsrd.com/papers/ijtsrd78583.pdf



IJTSRD78583

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mass. Adolescence gains 20% of adult weight and 30% adult height in the adolescence period.

Iron deficiency anaemia is the most common type of anaemia in all age group and it is the most common type of anaemia in the world.

Adolescents account for one fifth of the world's population and have been on an increasing trend. In India, they account for 22.8% of the population (as on 1st March 2000, according to the Planning Commission's Population projections). This implies that about 230 million Indians are adolescents in the age group of 10 to 19 years. The term adolescent means „to emerge“ or „achieve identity“.

STATEMENT OF PROBLEM

A study to assess the knowledge regarding anaemia and its management among adolescent girls in selected school of Lucknow with a view to develop an information booklet.

OBJECTIVES

1. To assess the existing level of knowledge regarding anaemia and its management among adolescent girls.
2. To find out the association between level of knowledge scores among adolescent girls with their selected Socio demographic variables.
3. To develop and distribute information booklet regarding anaemia and its management among adolescent girls.

RESEARCH HYPOTHESIS

Hypothesis is a tentative statement about the relationship, if any between two or more variables. Hypothesis will be tested at $p < 0.05$ significance level.

H1- There is a significant association between level of knowledge scores regarding anaemia and its management among adolescent girls with their selected socio demographic variables.

OPERATIONAL DEFINITION

Assess: It refers to determination of knowledge among adolescent girls regarding iron deficiency anemia and its management through structured knowledge questionnaire.

Knowledge: It refers to understanding of adolescent girls regarding iron deficiency anemia and its management which will be measured by the structured knowledge questionnaire.

Anemia (Iron Deficiency Anemia) Iron deficiency anemia is a common nutritional disorder seen among adolescents. It is a decrease in the number of red blood cells in the blood caused by deficiency of iron.

Adolescent girls: It refers to the girls between the age group of 15 - 20 year are studying at Shia girls inter college, Lucknow, U.P.

Information booklet: It refers to the systematically developed and organized information booklet designed to give the knowledge regarding iron deficiency anemia its causes, sign and symptoms diagnosis, prevention and management of iron deficiency anemia among adolescent girls.

ASSUMPTION OF THE STUDY

The study assumes that-

1. The adolescent girls will have some knowledge regarding iron deficiency anemia and its management.
2. They would be willing to express their knowledge regarding iron deficiency anemia and its management.
3. The responses to questionnaire will reflect their actual knowledge regarding iron deficiency anemia and its management.
4. Information booklet will improve the knowledge regarding anemia and its management.

DELIMITATIONS

This study is delimited to:

1. Adolescent girls who are present in the Shia girls inter college, at the time of data collection.
2. Assessment of knowledge only once before the distribution of the information booklet through the written responses obtained through a structured knowledge questionnaire.
3. 135 adolescent girls only.

RESEARCH APPROACH

Research approach tells the researcher from whom to collect the data and how to analyze it.

In view of the nature of the problem selected for the study and the objective to be accomplished a quantitative research approach was considered to be the most appropriate approach in order to assess the knowledge regarding anemia and its management among adolescent girls in selected school of Lucknow with view to develop an information booklet.

POPULATION

Population is the aggregation of all the units in which a researcher is interested.

Target population: It is the aggregate of cases that confirm to designated criteria and are also accessible as subjects for a study. In this study the target population is 450 adolescent girls from 11th and 12th standard.

Accessible population: A target population consists of the total number of people or objects which are meeting the designated set of criteria. In this study the accessible population is 135 adolescent girls which are from the art section.

SETTING OF STUDY (SOURCE OF DATA COLLECTION)

In this study, the sample consisted of adolescent girls from Shia girls inter college Lucknow U.P., belongs from art group, 11th and 12th standard

RESEARCH DESIGN

In this study, non-experimental descriptive research design was used.

SAMPLE AND SAMPLING TECHNIQUES

Sample

In this study, the sample consisted of adolescent girls from Shia girls inter college Lucknow U.P., belongs from art group, 11th and 12th standard.

Sample size

135 adolescent girls who fulfill the criteria of selection and studying in Shia girls inter college Lucknow U.P.

Sampling technique

In this study “non-probability convenience sampling technique” was used.

CRITERIA FOR SAMPLE COLLECTION

INCLUSIVE CRITERIA – This includes,

1. Adolescent girls (15 -20 years)
2. Who understand English or Hindi
3. Who are available at the time of data collection

EXCLUSIVE CRITERIA – This includes

1. Adolescent girls less than 15 & more than 20 year.
2. Who are not willing to participate.

DESCRIPTION OF TOOLS

In this study tool consist of two parts:

Section A: Demographic Variables

Section B: Structured Knowledge Questionnaire

RESULTS AND DISCUSSION

SECTION A- Assessment of knowledge regarding the anemia and its management among adolescent girls in selected school of lucknow with a view to develop an information booklet.

Table 1: Frequency Percentage distribution of sample subjects according to the level of knowledge.

S. NO.	LEVEL OF KNOWLEDGE	FREQUENCY	PERCENTAGE
1	Inadequate	66	48.9%
2	Moderate	44	32.6%
3	Adequate	25	18.5s%
Total		135	100

SECTION B-

This section is related to testing of hypothesis i.e. association between the level of knowledge scores with their selected demographic variables.

In order to determine the association between the levels of knowledge scores with their selected demographic variables, the following hypothesis was formulated- **H1:** There will be a significant association between level of knowledge scores with their selected demographic variables.

Table 2: Association between level of knowledge score regarding anemia and its management among adolescent girls with their selected demographic variables.

S. No.	Variables	Level of Knowledge						Statistical Significance			
		Inadequate(n=66)		Moderate (n=44)		Adequate(n=25)		χ^2	df	p-Value	Table Value (P<0.05)
		number	Percent age (%)	Number	Percent age (%)	Number	Percent age (%)				
1	Age in Years										
	15-16 year	30	45.5%	29	65.9%	15	60.0%	7.138	4	0.129	9.49
	17-18 year	32	48.5%	15	34.1%	8	32.0%				
	19- 20 year	4	6.1%	0	0.0%	2	8.0%				
	Above 20	0	0.0%	0	0.0%	0	0.0%				
2	Educational Qualification										
	11 th standard	50	75.8%	39	88.6%	23	92.0%	4.871	2	0.088	5.99
	12 th standard	16	24.2%	5	11.4%	2	8.0%				

3	Religion of the Participant										
	Hindu	3	4.5%	3	6.8%	4	16.0%	4.4 95	4	0.3 43	9.49
	Muslim	62	93.9%	41	93.2%	21	84.0%				
	Others	1	1.5%	0	0.0%	0	0.0%				
4	Type of Family										
	Nuclear family	20	30.3%	11	25.0%	8	32.0%	2.5 13	4	0.6 42	9.49
	Joint family	38	57.6%	30	68.2%	16	64.0%				
	Extended family	8	12.1%	3	6.8%	1	4.0%				
5	Family Income per Month										
	Rs. 10,000-15000	53	80.3%	40	90.9%	24	96.0%	8.6 88	6	0.1 92	12.59
	Rs. 15,001-20,000	9	13.6%	2	4.5%	0	0.0%				
	Rs. 20,001-25,000	3	4.5%	2	4.5%	0	0.0%				
	Rs. 25,001-30,000	1	1.5%	0	0.0%	1	4.0%				
	Rs. 30001 and above	0	0.0%	0	0.0%	0	0.0%				
6	Previous Information Regarding Anemia and its Management										
	Books, articles	19	28.8%	17	38.6%	6	24.0%	4.2 8	8	0.8 3	15.51
	Colleagues	7	10.6%	4	9.1%	3	12.0%				
	Mass media	1	1.5%	1	2.3%	1	4.0%				
	Family member	22	33.3%	16	36.4%	8	32.0%				
	No Information	17	25.8%	6	13.6%	7	28.0%				
7	Menstrual Cycle										
	Regular	37	56.1%	31	70.5%	20	80.0%	6.6 03	4	0.1 58	9.49
	Irregular	21	31.8%	9	20.5%	5	20.0%				
	Heavy Bleeding	8	12.1%	4	9.1%	0	0.0%				
8	Dietary Pattern										
	Vegetarian	25	37.9%	12	27.3%	11	44.0%	2.2 51	2	0.3 25	5.99
	Non Vegetarian	41	62.1%	32	72.7%	14	56.0%				
9	Family Health Status										
	Healthy	26	39.4%	15	34.1%	9	36.0%	9.1 81	8	0.3 27	15.51
	Anemia	20	30.3%	11	25.0%	12	48.0%				
	High Blood Pressure	6	9.1%	7	15.9%	0	0.0%				
	Jaundice	3	4.5%	1	2.3%	0	0.0%				
	Diabetes	11	16.7%	10	22.7%	4	16.0%				
	If others than specify	0	0.0%	0	0%	0	0.0%				

The data given in this table shows that Chi square test was used to find out significant association between level of knowledge scores with their selected demographic variables. The findings of chi square shows that there is no significant association between the level of knowledge scores with demographic variables like: - Age in year Educational Qualification, Religion of the Participant, Type of Family, Family Income per Month, Previous Information Regarding Anemia and its Management, Menstrual Cycle, Dietary Pattern, Family Health Status.

Here the p- value in each case is greater than 0.05 (level of significance).

DISCUSSION

The present study was aimed to assess the knowledge regarding anemia and its management among adolescent girls in selected school of Lucknow with a view to develop an information booklet in order to achieve the objectives of the study.

Descriptive design was adopted and 135 adolescent girls were selected by using non-probability convenience sampling technique that was fulfilling the inclusion and exclusion criteria.

The subjects were evaluated through structured knowledge questionnaire regarding anemia and its management.

SUMMARY

This chapter discusses about the objectives and their relation to the findings from the results and review of the related studies.

The present study was aimed to assess the knowledge regarding anemia and its management among adolescent girls in selected school of Lucknow with a view to develop an information booklet in order to achieve the objectives of the study.

Descriptive design was adopted and 135 adolescent girls were selected by using non-probability convenience sampling technique that was fulfilling the inclusion and exclusion criteria.

The subjects were evaluated through structured knowledge questionnaire regarding anemia and its management.

Structured knowledge questionnaire consists of 30 questions to evaluate the level of knowledge.

Data collection and analysis were carried out based on the objective of the study. Findings of the study were discussed in terms of objectives and hypothesis along with the findings of other studies.

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