



“A DESCRIPTIVE STUDY TO ASSESS KNOWLEDGE REGARDING IRON DEFICIENCY ANEMIA AMONG MOTHERS OF ADOLESCENT GIRLS AT PALLITHOTTAM, KOLLAM WITH A VIEW TO DEVELOP AN INFORMATION BOOKLET”

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ABSTRACT

The research project under took was “A study to assess the knowledge regarding iron deficiency anaemia among mothers of adolescent girls at Pallithottam, Kollam with a view to develop an information booklet.” The objectives of the study were to assess the knowledge regarding iron deficiency anaemia among mothers of adolescent girls, to find out the association between knowledge regarding iron deficiency anaemia among mothers of adolescent girls and selected demographic variables and to develop an information booklet regarding iron deficiency anaemia among mothers of adolescent girls. A quantitative non-experimental descriptive research design was adopted for this study. The study was conducted among adolescent girls at Pallithottam, Kollam. In order to assess the knowledge regarding iron deficiency anaemia among mothers of adolescent girls was selected by convenience sampling technique. The tool used for data collection consisted of variables and self-structured questionnaires, basic introduction of the study were given to the subjects. The analysis of the data was based on the objectives of the study.

The Major findings of the study were as follows:

The Study shows that out of 60 samples 60% of sample had good knowledge. 30% had average knowledge and 10% had poor Knowledge regarding iron deficiency anaemia. The study found that there was significant association between knowledge and demographic variables such as age, type of family, number of adolescent child, income of the family and education of mother.

KEYWORDS: assess, adolescent, knowledge, iron deficiency anaemia, self structured questionnaires.

INTRODUCTION

Anaemia is a major health problem throughout the world, in that iron deficiency anaemia is one of the commonest forms of anaemia. The prevalence of iron deficiency anaemia is higher in developing countries like India, especially affecting school age, adolescents and women of childbearing age. Adolescence is an opportune time for interventions to address anaemia, as it is an important time of growth and development.^[1] WHO defines anaemia as a condition in which the haemoglobin content of the blood is lower than normal as a result of a deficiency of one or more essential nutrients. The Cut-off point of haemoglobin levels recommended by WHO to diagnose anaemia are <13g/dl for adult men, <12g/dl for adult non-pregnant women, <11g/dl for pregnant women and children from 6 months to 6 years and <12 for children from 6 years to 14 years.^[2]

Iron deficiency anaemia is a state of inadequate amount of iron (below 12g/dl in women) to synthesis the haemoglobin in the body. This affects the oxygen transport throughout the body cells. It is because of lack of iron content in the daily diet (due to poverty, illiteracy), impaired absorption of iron (due to metabolic disorders), increased requirement of iron (due to menstruation or pregnancy), and chronic blood loss (due to parasitic infestation, haemorrhagic gastritis etc.)³. Anaemia is the most common nutritional deficiency disorder in the world. It is a condition that occurs when the red blood cells do not carry enough oxygen to the tissues of the body. WHO(2008) defines anaemia as a condition in which the haemoglobin (Hb) content of blood is lower than normal as a result of deficiency of one or more essential nutrients. Most of the anaemia are due to inadequate supply of nutrients like iron, folic acid and vitamin B12, proteins, amino acids, vitamins A, C, and other vitamins of B-complex group i.e., niacin and

pantothenic acid are also involved in the maintenance of haemoglobin level.^[4]

STATEMENT OF THE PROBLEM

“To assess the knowledge regarding Iron deficiency anaemia among mothers of adolescent girls at pallihottam, Kollam with a view to develop an information booklet.”

OBJECTIVES

The objectives of the study were:

- ❖ To assess the knowledge regarding Iron deficiency anaemia among mothers of adolescents girls.
- ❖ To find out the association between knowledge regarding Iron deficiency anaemia among mothers of adolescent girls and selected demographic variables.
- ❖ To develop an information booklet regarding Iron deficiency anaemia among mothers of adolescents girls.

OPERATIONAL DEFINITIONS

- ❖ **Assess:** In this study it refers to evaluate or estimate the nature, ability or quality of something. In this study the assess refers to determine the knowledge of mothers regarding Iron deficiency anaemia.
- ❖ **Knowledge:** In this study it refers to the understanding or gaining of skills through experience. In this study knowledge refers to subjective response to questions regarding Iron deficiency anaemia.
- ❖ **Mother:** In this study it refers to the mothers of adolescent girls.
- ❖ **Iron deficiency anaemia:** In this study it refers to a condition when your blood lacks enough healthy red blood cells or haemoglobin.
- ❖ **Information booklet:** In this study it designed to delivers relevant information on a topic for a given target audience, presented in a style that is easy to understand and visually engaging.

RESEARCH METHODOLOGY

Research approach	: Quantitative research
Research design	: Non-Experimental research design
Variables	: Research Variables: knowledge regarding Iron deficiency anaemia among mothers of adolescent girls. : Socio - demographic variables: Socio demographic variables include number of children, age, and education of mother, types of family and income of family.
Setting of the study	: The setting of the study was at Pallihottam, Kollam.
Population	: The population of this study was mothers of adolescent girls at Pallihottam, Kollam
Sample	: In this study the samples selected were 60 mothers of adolescent girls at Pallihottam, Kollam
Sample Size	: In this study the sample size was 60 mothers of adolescent girls at Pallihottam, Kollam who fulfilled the inclusion criteria.
Sampling Technique	: The sample technique used in the study was purposive sampling.

RESULTS AND DISCUSSION

Table 1: Age of child.

SL NO	AGE OF CHILD	KNOWLEDGE		
		GOOD	AVERAGE	POOR
1	10-12	16	9	0
2	13-15	8	4	4
3	16-19	12	5	2

The table of data regarding age of child shows that out of 60 sample 16 had good knowledge, 9 had average knowledge and no one is having poor knowledge in the age group of 10-12years, In the age group of 13-15

years, 8 had good knowledge, 4 had average knowledge 4 had poor knowledge and In the age group of 16-19 years, 12 had good knowledge, 5 had average knowledge and 2 had poor knowledge.

Table 2: Type of family.

SL NO	TYPE OF FAMILY	KNOWLEDGE		
		GOOD	AVERAGE	POOR
1	Nuclear Family	26	7	4
2	Joint Family	10	11	2

The table of data regarding type of family shows that in nuclear family 26 had good knowledge, 7 had average

knowledge and 4 had poor knowledge. In joint family, 10 had good knowledge, 11 had average knowledge and 2 had poor knowledge.

Table 3: Number of adolescent children.

SL NO	NUMBER OF ADOLESCENT CHILDREN	KNOWLEDGE		
		GOOD	AVERAGE	POOR
1	1	19	5	2
2	2	10	12	4
3	3	7	1	0

The table of data regarding number of adolescent children shows that out of 60 samples, 19 had good knowledge, 5 had average knowledge and 2 had poor knowledge in a family with 1 adolescent child. In a family with 2 adolescent children, 10 had good

knowledge, 12 had average knowledge and 4 had poor knowledge. In a family with 3 adolescent children, 7 had good knowledge, 1 had average knowledge and no one had poor knowledge.

Table 4: INCOME OF FAMILY.

SL NO	INCOME OF FAMILY	KNOWLEDGE		
		GOOD	AVERAGE	POOR
1	<5000	12	4	1
2	10000-30000	18	6	5
3	>30000	6	8	0

The table of data regarding the income of family shows that 12 had good knowledge, 4 had average knowledge and 1 had poor knowledge in a family with <5000 income. In a family with income of 10000-30000, 18 had

good knowledge, 6 had average knowledge and 5 had poor knowledge. In a family with >30000 income 6 had good knowledge, 8 had average and no poor knowledge family.

Table 5: Education of mother.

SL NO	EDUCATION MOTHER	KNOWLEDGE		
		GOOD	AVERAGE	POOR
1	UP	1	2	1
2	HS	15	6	3
3	HSS	20	10	2

The table of data regarding education of mother shows that 1 had good knowledge, 2 had average knowledge and 1 had poor knowledge for mother of adolescent girls having Upper Primary education. In a mother of adolescent girls having High school education, 1 had

good knowledge, 2 had average knowledge, and 1 had poor knowledge. In a mother of adolescent girls having higher secondary education, 20 had good knowledge, 10 had average knowledge and 2 had poor knowledge.

Table 2: Chi - square value showing association of knowledge score with selected demographic variables.

Sl.No	Variables	Knowledge			df	Chi square value	Table value	Inf
		Good	Average	Poor				
1	Age of child							
	10-12 yrs	16	9	0				
	13-15 yrs	8	4	4	4	7.2	2.78	S
2	Type of family							
	Nuclear family	26	7	4				
	Joint family	10	11	2	2	5.70	4.30	S
3	No.of adolescent children							
	1	19	5	2				
	2	10	12	4	4	9.53	2.78	S
	3	7	1	0				
4	Income of family							

	<5000	12	4	1				
	10000-30000	18	6	5	4	8.74	2.78	S
	>30000	6	8	0				
5	Education of mother							
	UP	1	2	1				
	HS	15	6	3				
	HSS	20	10	2	4	3.125	2.78	S

0.05- level of significance

S-Significant

From the above statistical data, it was clear that there is significant association of knowledge regarding iron deficiency anaemia among mothers of adolescent girls with demographic variable such as age, type of family, number of adolescent children, income of family, education of mother.

DISCUSSION

The present study was intended to assess the knowledge regarding Iron deficiency anaemia among mothers of adolescent girls at pallihottam, Kollam with a view to develop an informational booklet. In order to achieve the objectives of the study, a non-experimental descriptive research design was adopted. The subjects were selected by purposive sampling. The sample consisted of 60 mothers of adolescent girls at pallihottam, Kollam. The findings of the study have been discussed in relation to the objectives and other similar studies.

OBJECTIVES

The objectives of the study were:

- ❖ To assess the knowledge regarding Iron deficiency anemia among mothers of adolescents girls.
- ❖ To find the association between knowledge regarding Iron deficiency anemia among mothers of adolescent girls and selected demographic variables.
- ❖ To develop an information booklet regarding Iron deficiency anemia among mothers of adolescents girls.

Discussion of findings with other studies based on objectives

Assess the knowledge of mothers of adolescent girls regarding Iron deficiency anemia.

This section deals with the level of knowledge regarding iron deficiency anemia among mothers of adolescent girls in out of 60 samples. Knowledge score was graded into poor, good, average, based on the scores obtained. The data shows that of sample had 60% had good knowledge, 30% had average knowledge and 10% had poor knowledge regarding iron deficiency anemia.

A study to assess the prevalence of iron deficiency anemia among adolescent girls in Bihar, India (2015).

A cross-sectional study was done in the biochemistry clinical laboratory of Indira Gandhi Institute of Medical Sciences; Bihar, India for a period of (April 2015-

October 2015). The sample size was 200 adolescent girls. Hemoglobin estimation was done by Sahli's method. Total iron and Total Iron Binding Capacity estimation was done by Ferrozine method on fully automated chemistry analyzer Olympus AU 400 with the reagent kit available in the market. Ferritin estimation was done by chemiluminescence immunoassay method, using Access 2 (Beckman. Out of 200 girls, 50% adolescent girls were found to be anemic. Of the total, 43.3% were mildly, 3.3% were moderately and 3.3% were severely affected by anemia.

Association between knowledge regarding Iron deficiency anemia among mothers of adolescent girls and selected demographic variables. The association was complicated by chi square test. In the case of age, the chi-square value was 7.2 which are greater than table value 2.78 at 0.05 level of significance. So there was significant association between age and knowledge regarding iron deficiency anemia among mothers of adolescent girls at pallihottam Kollam. In the case of Type of family the chi-square value was 5.70 which are greater than table value 4.30 at 0.05 level of significance. So there was significant association between Type of family and knowledge regarding iron deficiency anemia among mothers of adolescent girls. In case of number of adolescent girls in the family the chi-square value was 9.53 which are greater than table value 2.78 at 0.05 level of significance. So there was significant association between number of adolescent girls and knowledge regarding iron deficiency anemia among mothers of adolescent girls. In the case of income of family the chi-square value was 8.74 which are greater than table value 2.78 at 0.05 level of significance. So there was significant association between income of family and knowledge regarding iron deficiency anemia among mothers of adolescent girls. In the case of education of mother the chi-square value was 3.12 which are greater than table value 2.78 at 0.05 level of significance. So there was significant association between educations and knowledge regarding iron deficiency anemia among mothers of adolescent girls.

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