

A STUDY TO ASSESS THE KNOWLEDGE REGARDING IRON DEFICIENCY ANAEMIA AMONG ADOLESCENT GIRLS AGE GROUP BETWEEN 13 TO 17 YEARS IN SELECTED JUNIOR COLLEGE, HYDERABAD

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ABSTRACT

The Iron deficiency anaemia is one of the most prevalent common nutritional deficiency in the world especially among adolescent girls. High prevalence of iron deficiency anaemia reflects their poor status of nutrition because of their rapid growth combined with poor eating habits and menstruation. Objectives of the Study: To assess the knowledge of adolescent girls regarding Iron deficiency anaemia. To associate the selected demographic variables with level of knowledge on Iron deficiency anaemia among adolescent girls. According to polit and hungler a population is an aggregate or totality of all subjects that progress a set of specializations. The target population is the group of population comprises adolescent girls age group of 13-17 years. Sample consists of subject of the population selected to participate on the study. In the present study, the sample was adolescent girls in Junior College Hyderabad. The sample size for the present study was 30 adolescent girls. Descriptive statistics was used for data analysis, by using frequency and percentage for analysis the knowledge of adolescents regarding Iron deficiency anaemia in selected Junior College Hyderabad. Out of 30 adolescents most of people 17(56.6%) had inadequate knowledge belongs to the age group of 14-15 years less people 4(13.2%) had moderately adequate knowledge coming under the age group of 16-17 years.

Key words: Iron deficiency anaemia, adolescent girls, Junior College Hyderabad.

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INTRODUCTION

Malabsorption of Iron may result from alterations in the mucosa of duodenum and proximal jejunum resulting in Iron deficiency anaemia. Iron is used in the bone marrow to form Iron compounds called heme which are required for synthesis of haemoglobin. Heme accounts for two thirds of body's Iron, Iron concentration in the body is regulated by the absorptive cells in the proximal small intestine. These cells alter Iron absorption to match body losses or Iron errors in this balance also leads to iron deficiency anaemia [1].

OBJECTIVES OF THE STUDY:

1. To assess the knowledge of adolescent girls regarding Iron deficiency anaemia.
2. To associate the selected demographic variables with level of knowledge on Iron deficiency anaemia among adolescent girls.

OPERATIONAL DEFINITIONS:

Assess: The process and art of estimation of knowledge on Iron deficiency anaemia among adolescent.

Knowledge: Response or level of understanding of adolescent about Iron deficiency anaemia.



Iron deficiency anaemia: It is one type of nutritional anaemia that typically results when the intake of dietary iron is inadequate for haemoglobin synthesis.

Adolescent: The people belong to the age group between 13 – 17 years.

DELIMITATIONS:

The study is delimited to

1. Samples are restricted to a selected area in Hyderabad
2. Sample size is included are 30 adolescent girls.
3. Data collection period is limited to 5 days.

ASSUMPTIONS: This study assumes that

1. Adolescent girls are prone to get Iron deficiency anaemia. and may have lack of knowledge.
2. Educated people have more knowledge than uneducated people.
3. Adequate health education about Iron deficiency anaemia will improve the knowledge of adolescents.

PROJECT OUT COME:

The adolescent girls were become aware of their level of knowledge and increased knowledge was lead to positive attitude towards health.

In the present study the investigator intended to assess the knowledge regarding the Iron deficiency anaemia among adolescent girls.

The methodology adopted by the researcher for the study. It includes. Research design, population, sample and sampling technique, inclusion criteria, exclusion criteria, content validity, reliability, pilot study, collection of data and plan for data analysis.

Research Approach:

The research approach is the most significant part of any research the appropriate choice of the research depends on purpose of research study which is undertaken by survey [2].

Research design:

The research design adopted for the present study was descriptive research design. The present study was intended to assess the knowledge regarding Iron deficiency anaemia among adolescents girls in Selected Junior College Hyderabad.

Setting of the study:

The study was conducted in selected Junior College Hyderabad. It is situated 1km away from College of Nursing, Hyderabad.

Population:

According to polit and hungler a population is an aggregate or totality of all subjects that progress a set of specializations. The target population is the group of population comprises adolescent girls age group of 13-17 years.

Sample:

Sample consists of subject of the population selected to participate on the study. In the present study, the sample was adolescent girls in Junior College Hyderabad.

Sample Size:

The sample size for the present study was 30 adolescent girls.

Sampling Technique:

Convenient sampling technique adopted for the present study.

Criteria for sample collection:

The sample were selected according to the inclusion criteria.

Inclusion Criteria:

1. Adolescents age group between 13 to 17 years.
2. Adolescents who can understand and speak Telugu or English.
3. Adolescents who are willing to participate in the study.

Exclusion Criteria:

1. Adolescents who are not willing to participate in the study

Method of data collection

The investigator selected samples according to convenient sampling technique. The investigator was explained the purpose of the study and obtained consent before administration of the structured questionnaire to the adolescents girls in selected Junior College Hyderabad on the day of data collection. Data was collected from 10.08.2015 to 15.08.2015. the structured questionnaire was administered to 30 adolescent girls.

Description of Tool

Section - A:

The first section of the tool consists of demographic variables like age religion, educational status, dietary pattern, type of family, knowledge exposure whether; she undergo blood transfusion.

Part B

The second section consists of structured questionnaire of 25 questions related to knowledge on Iron deficiency anaemia. All the questions put together carry a total of 25 marks, 25 questions were a designed with multiple choice with one correct answer each question carries one mark

Pilot Study:

Pilot study was conducted to assess the level of knowledge regarding Iron deficiency anaemia among adolescents in selected junior College at Hyderabad ,



before conducting data collection to know the effectiveness of tool prepared by the investigator.

The pilot study was conducted in selected Junior College Hyderabad on 24-07-2015. The subjects were selected by convenient sampling technique confidentiality was assured to the subjects participated in the study.

Data analysis was done by using descriptive statistics, after the pilot study the tool was found to be applicable for the present study [3].

Data Collection Procedure:

The investigator informed to the sample about the purpose of the study and requested the co-operation of the adolescents for the study. As informed consent was taken and confidentiality was assured.

Data was collected from 10-08-2015 to 15.08.15 the time schedule was planned from 8 am to 12:30 pm for 6 days according to the availability of the sample totally 30 samples were selected.

Plan for Data Analysis:

Descriptive statistics was used for data analysis, by using frequency and percentage for analysis the knowledge of adolescents regarding Iron deficiency anaemia in selected Junior College Hyderabad.

- The response to items in Section – A demographic profile is placed to be summarized in percentages.
- Mean and standard deviation is used to calculate the knowledge score on iron deficiency anemia among adolescent girls.
- Chi-square is used to find out the association between knowledge with selected demographic variables[4].

DATA ANALYSIS AND INTERPRITATION

. The data is processed and analysed on the basis of the objectives and hypothesis formulated for the present study. Analysis was a process of organizing and synthesizing the data in such a way that research questions may be answered and hypothesis is tested. The result are computed using descriptive and inferential statistics based on the following objectives of the study.

The study findings are organised and presented under the following headings

Section – I: Description of demographic variables

Section – II: Item wise analysis of knowledge score of Iron deficiency anaemia among adolescent girls.

Table- I, Shows that frequency and percentage distribution of demographic variables of adolescent girls. Among 30 adolescents 0(30%) were found in the age group of 13-14 years ,11(33.3%) were coming under the age group of 14-15 years, 2(6.6%) 15-16 years and 17(70%) were found in the age group of 16-17 years.

Out of 30 adolescents 22(73.3%) were Hindu 2(6.6%) were belongs to Muslim and 6(20%) were Christians.

- Among 30 adolescents 9(30%) were vegetarian and 21(70%) were non vegetarian.

- Out of 30 adolescents 17(56.6%) were nuclear family and 13(43.3%) were joint family.

- Among 30 adolescents 7(23.3%) of adolescents are having 3 days menstruation and 14(46.6%) gained were 5 days menstruation and 9(30%) were 7 days and none of them having above 7 days menstruation.

Frequency and percentage distribution of adolescent girl's knowledge score on disease condition.

Table 2 shows that 10(33.3%) respondents answered correctly regarding anaemia, 8 (26.6%) respondents answered correctly regarding regarding the normal value of haemoglobin in male , 12(36.6%) respondents answered correctly regarding the normal value of haemoglobin in female , 8(26.6%) respondents answered correctly regarding the components , 7(23.3%) respondents answered correctly regarding meaning of iron deficiency anaemia and common type of anemia, 8 (26.6%) regarding cause of Iron deficiency anaemia, 4(13.3%) respondents correctly the nails in anaemia persons ,5(16.6%) respondents correctly regarding stool 10(33.3%) respondents answered correctly.

Frequency and percentage distribution of adolescent girls knowledge score on diagnostic findings

Table 3 Reveal that regarding diagnostic findings for anaemia 8(26.6%) respondents correctly. Regarding manually detect anaemia 4(13.3%) respondents answered correctly. Regarding laboratory 5(16.6%) respondents answered correctly. Regarding administration of deoctrose 4(13.3%) respondent's answered correctly and regarding severe complication of anaemia 6(20%) respondents answered correctly.

Frequency and percentage distribution of adolescent girl's knowledge score on Iron supplementation.

Table 4 Reveals that regarding usual Iron supplementation 6(20%) respondents correctly answered, regarding correct time for taking iron supplementation 8(26.6%) respondents correctly, regarding prevented of anaemia 15(50%) respondents correctly, regarding absorption of iron in 15(50%) respondents correctly. Regarding vit-c is rich in 10(33.33%) respondents correctly, regarding rich food sources in iron 15(50%) respondents correctly regarding food source. Rich in vit-C 10(33.3%) respondents correctly.

The data presented in table 5 shows that overall mean score of knowledge on Iron deficiency anaemia among adolescent girls mean was 9.9 and their standard deviation 55.8.

Table 5 Show the association of demographic variables with the level of knowledge regarding Iron deficiency anaemia among 30 adolescents who participated in the study.

- Among 30 adolescents most of people of 17 (56.1%) had inadequate knowledge belongs to the age group of 14-



15 yrs less people 4(13.2%) had moderately adequate knowledge consist under the age group 16-17 yrs.

➤ Out of 30 adolescents dietary pattern 14(46.3%) were vegetarian had inadequate knowledge and 11(36.6%) were nonvegetarian had inadequate knowledge and 4 (13.2 non-vegetarian had moderately adequate knowledge).

Table – II: Describes the frequency and percentage distribution of level of knowledge regarding Iron deficiency anaemia among adolescents. Among 30 adolescents who participated 29(96.6%) had inadequate knowledge 1(3.3%) of them had moderately adequate knowledge and 0(0%) had adequate knowledge [5,6].

Table 1. Frequency and percentage distribution of demographic variables

N = 30

Sl.No	Demographic Variables	Frequency	Percentage
1.	Age		
	a. 13-14 years	0	0%
	b. 14-15 years	11	33.3%
	c. 15-16 Years	2	6.6%
	d. 16 – 17 Years	17	70%
2.	Religion		
	a. Hindu	22	73.3%
	b. Muslim	2	6.6%
	c. Christian	6	20%
	d. Any Other	0	-
3.	Dietary pattern		
	a. Vegetarian	9	30%
	b. Non-vegetarian	21	70%
4.	Type of family		
	a. Nuclear family	17	56.6%
	b. Joint family	13	43.3%
5	Duration of Menstruation		
	a. 3 days	7	23.3%
	b. 5 days	14	46.6%
	c. 7 days	9	30%
	d. More than 7 days	-	-

Table 2. Frequency and percentage distribution of adolescent girls knowledge score on Iron deficiency anaemia.

N = 30

S.N	Questionnaire	Frequency	Percentage
1	Iron Deficiency anaemia is a		
	a. Congenital disease	4	13.3%
	b. Communicable disease	6	20%
	c. Hereditary disease	10	33.3%
	d. Nutritional deficiency disorders	10	33.3%
2	What is the normal value of hemoglobin for male's?		
	a. 20gm/dl	3	10%
	b. 12-14 gm/dl	10	33.3%
	c. 17-19gm/dl	9	30%
	d. 14-16gm/dl	8	26.6%
3	What is the normal value of the hemoglobin for female's		
	a. 12-14gm/dl	10	33.3%
	b. 14-16gm/dl	12	40%
	c. 16-18gm/dl	3	10%
	d. 18-20gm/dl	5	16.6%
4	What is the necessary component for the production of hemoglobin in Blood?		
	a. Calcium	6	20%
	b. Potassium	10	33.3%
	c. Iron	8	26.6%
	d. Zinc	6	20%



5	What is the meaning of Iron deficiency anaemia		
	a. Decreased level of hemoglobin	7	23.3%
	b. Increased level of hemoglobin	8	26.6%
	c. Destruction of RBC	10	33.3%
	d. Due to less intake of green leafy vegetables	5	16.6%
6	Which is the most common type of anaemia among people		
	a. Thalassemia	8	26.6%
	b. Iron deficiency anaemia	7	23.3%
	c. Sickle cell anaemia	10	23.3%
	d. Megaloblastic anaemia	5	16.6%
7	What is the most common cause of Iron deficiency anaemia in premenopausal women		
	a. Menorrhagia	4	13.3%
	b. Ulcer's	6	20%
	c. Gastritis	10	33.3%
	d. Gastro intestinal tumours	10	33.3%
8	What are the most common cause of Iron deficiency anaemia		
	a. Bleeding	8	26.6%
	b. Gastritis	8	26.6%
	c. Inflammatory	4	13.3%
	d. Ulcer's	10	33.3%
9	What type of nail present in anaemic person		
	a. Brittle nail's	8	26.6%
	b. Ridged nail's	5	16.6%
	c. Spoon shaped nail's	8	26.6%
	d. Pallor nail's	9	30%
10	What is Iron deficiency anaemia, the colour stool		
	a. Yellow	8	26.6%
	b. Dare Green	10	33.3%
	c. Green	5	16.6%
	d. Blood stained stool	7	23.3%

Table 3. Frequency and percentage distribution of adolescent girl's knowledge score on diagnostic finding of anaemia.
N = 30

S.N	Questionnaire	Frequency	Percentage
11	What is the diagnostic findings for anaemia		
	a. Bone marrow aspiration	10	33.3%
	b. Endoscopy	10	33.3%
	c. Barium studies	2	6.6%
	d. Complete blood examinations	8	26.6%
12	How to detect the anaemia manually		
	a. Seeing conjunctiva	4	13.3%
	b. Checking pulse rate	6	20%
	c. Checking B.P.	10	33.3%
	d. Checking temperature	10	33.3%
13	What is the most reliable laboratory test in evaluating Iron Deficiency Anaemia?		
	a. Ferritin and hemoglobin levels	7	23.3%
	b. Hematocrit and R.B.C. Levels	8	26.6%
	c. R.B.C. levels and W.B.C levels	10	33.3%
	d. Blood culture and platelet levels	5	16.6%
14	What is the complications that may occurs due to iron supplementation		
	Abdominal pain	8	26.6%
	Constipation	8	26.6%
	Diarrhoea	10	33.3%
	Shock	4	13.3%



15	What is the preferable route for the administration of Iron dietary		
	Intravenous	10	33.3%
	Intra muscular	4	13.3%
	Sub cutaneous	10	33.3%
	Intra dermal	6	20%

Table 4. Frequency and percentage distribution of adolescent girl’s knowledge score on Iron supplementation.

N = 30

S.N	Questionnaire	Frequency	Percentage
16	Which food sources has rich in Iron		
	a. Jaggery	15	50%
	b. Pulses	5	16.6%
	c. Citrus fruits	4	13.3%
17	d. Tomatoes	6	20%
	Which food sources that rich in vitamin C is		
	a. Citrus fruits	10	33.3%
	b. Fish	10	33.3%
18	c. Chicken	5	16.6%
	d. Fish liver oil	5	16.6%
	What is the usual form of Iron supplementation		
	a. Ferrous oxide	6	20%
19	b. Ferrous Gluconate	6	20%
	c. Ferrous sulphate	10	33.3%
	d. Ferrous Fumarate	8	26.6%
	What is the correct time for taking the Iron supplement’s		
20	a. One hour before meals	6	20%
	b. One hour after meals	6	20%
	c. Two hours before meals	8	26.6%
	d. Two hours after meals	10	33.3%
21	Iron Deficiency anaemia can be prevented by taking		
	a. Fruits & Vegetables	10	33.6%
	b. Milk & Milk production	15	50%
	c. Rice	2	6.6%
22	d. Betal Nut	3	10%
	Which vitamin that helps in the absorption of Iron is		
	a. Vitamin - A	4	10%
	b. Vitamin – B	6	20%
23	c. Vitamin – C	10	50%
	d. Vitamin – D	10	20%
	Which of the following fruits is rich in Vitamin – C		
	a. Apple	4	13.3%
24	b. Banana	6	20%
	c. Citrus Fruits	10	33.6%
	d. Pine apple	10	33.6%
	How to prevent Iron deficiency anaemia		
25	a. supplementing Iron rich diet	6	20%
	b. supplementing protein rich diet	10	33.3%
	c. supplementing fibber rich diet	10	33.3%
	d. None of these	4	13.3%
26	What is the complication of severe anaemia		
	a. Heart disease	4	13.3%
	b. Paralysis	6	20%
	c. Renal Disease	10	33.6%
27	d. Respiratory disease	10	33.6%
	What is the daily requirement of Iron		
	20 mg/ day	6	20%



10 mg/ day	8	26.6%
12 mg/ day	6	20%
15 mg/ day	10	33.3%

Table 5. Mean and standard deviation of knowledge on Iron deficiency anaemia among adolescent girls

N = 30

Criteria	Mean	Standard deviation
Level of Knowledge	9.9	55.8

Table 6. Association of demographic variables with level of knowledge. Regarding Iron deficiency anaemia among adolescents.

N = 30

Sl.No	Demographic	Inadequate Knowledge		Moderately Adequate knowledge		Adequate knowledge		Chi-Square
		F	%	F	%	F	%	
1	Age in years							CV = 1.723 TV = 7.8% Df = 3 p = 0.05 NS
	13-14 yrs	0	0	-	-	-	-	
	14-15 yrs	17	56.6%	-	-	-	-	
	15-16 yrs	2	6.7%	-	-	-	-	
	16-17 yrs	7	23.6%	4	13.3%	-	-	
3	Religion							CV = 13.398 TV = 7.81 Df = 3 P = 0.05 S
	a. Hindu	22	73.3%	1	3.3%	-	-	
	b. Muslim	2	6.6%	-	-	-	-	
	c. Christian	5	16.6%	-	-	-	-	
	d. Any other	0	0%	-	-	-	-	
5	Dietary pattern							CV = 0.14 TV = 3.84 Df = 1 P = 0.05 NS
	a. Vegetarian	11	36.6%	4	13.2%	-	-	
	b. Non- Vegetarian	14	46.6%	-	-	-	-	
6	Type of family							CV = 0.0079 TV = 3.84 Df = 1 P = 0.05 NS
	a. Nuclear family	15	49.1%	-	-	-	-	
	b. Joint family	13	43.3%	2	6.6%	-	-	
7	Duration of menstruation							CV = 2.5417 TV = 7.81 Df = 3 P = 0.05 NS
	a. 3 days	7	23.3%	-	-	-	-	
	b. 5 days	-	-	14	46.6%	-	-	
	c. 7 days	9	30%	-	-	-	-	
	d. above 8 days	0	0	-	-	-	-	

Table 7. Frequency and percentage distribution of level of knowledge regarding Iron deficiency anaemia among adolescents.

N = 30

Sl.No	Level of knowledge	Frequency	Percentage
1	Adequate Knowledge	0	0%
2	Moderate Knowledge	1	3.3%
3	Inadequate Knowledge	29	96.6%



Fig 1. Percentage distribution of adolescent girls by their age in years

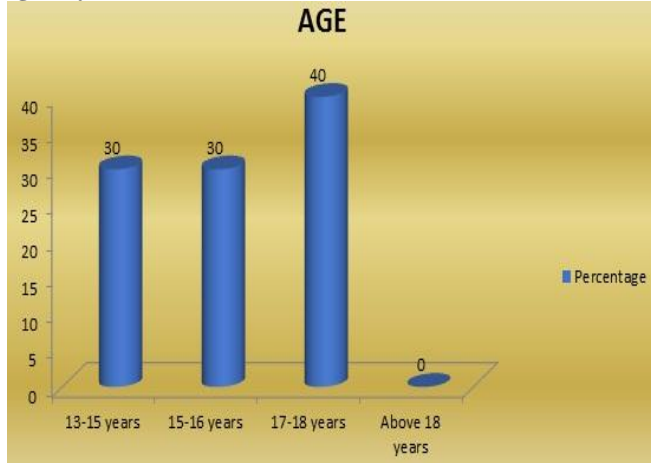


Fig 2. Percentage distribution of adolescent girls by their Religion

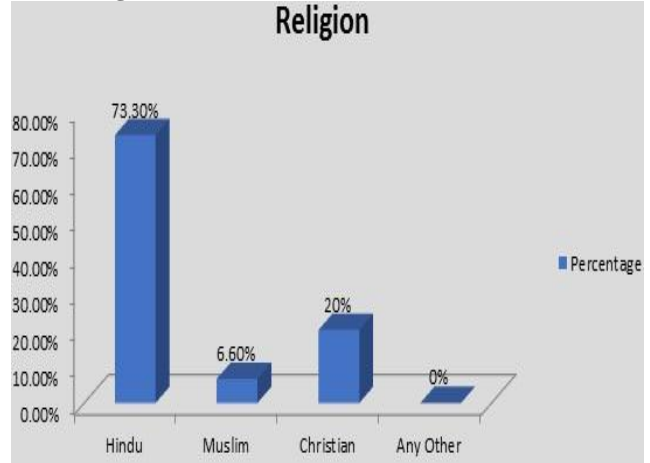


Fig 3. Percentage distribution of adolescent by their dietary pattern

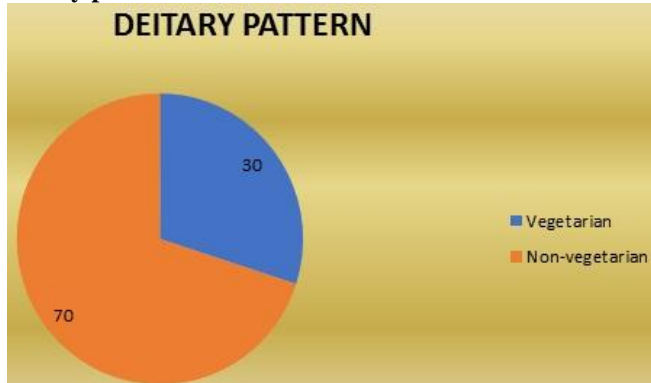


Fig 4. Percentage distribution of adolescent by their Type of family

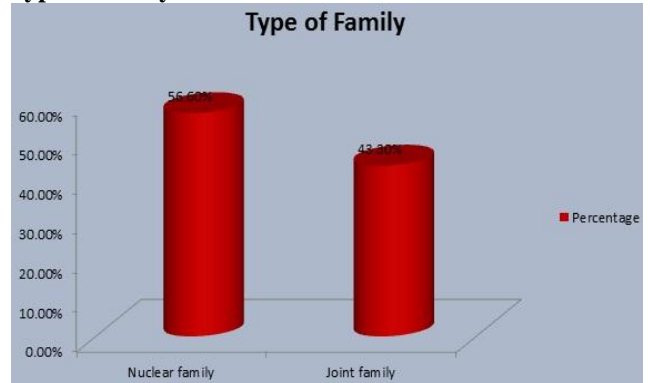


Fig 5. Percentage distribution of adolescent girls according to Duration of menstruation

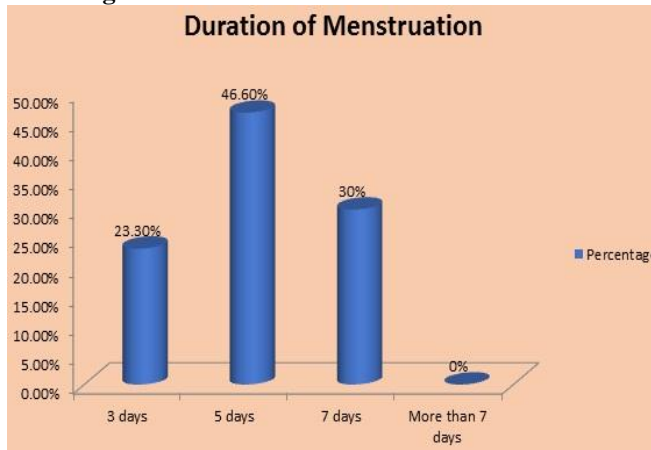
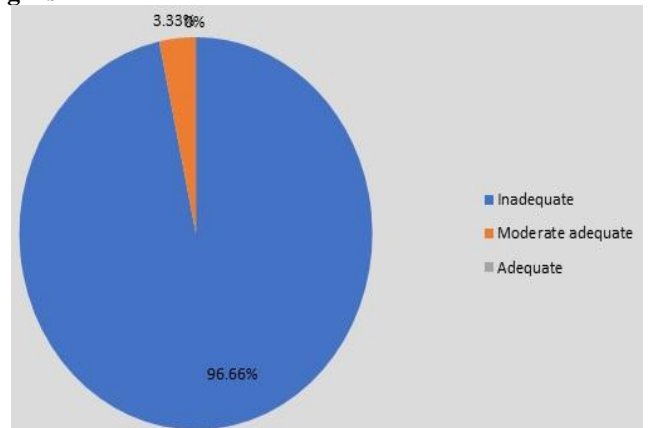


Fig 6. Percentage distribution of level of knowledge regarding Iron deficiency anaemia among adolescent girls



DISCUSSION

The present study has been undertaken to assess the knowledge regarding Iron deficiency anaemia among adolescents. A total of 30 samples adolescent were selected for the study through convenient sampling technique. The first objective of the study was to assess

the knowledge regarding Iron deficiency anaemia among adolescents girls who participated in the study [7].

Characteristics of sample

It can Shows that among 30 adolescent girls who participated 29(96.6%) had inadequate knowledge 1(3.3%) had adequate knowledge.



Out of 30 adolescents most of people 0(0%) had inadequate knowledge belongs to the age group of 13-14 years less people 4(13.2%) had moderately adequate knowledge, coming under the age group of 14-15 years.

- Out of 30 adolescents 22(73.3%) were Hindu 2(6.6%) were belongs to Muslim and 6(20%) were Christian.
- Out of 30 adolescents dietary pattern 14(46.3%) were vegetarian had inadequate knowledge and 11(36.6%) were nonvegetarian had inadequate knowledge and 4 (13.2 non-vegetarian had moderately adequate knowledge).
- Out of 30 adolescents 15(49.1%) were nuclear family were inadequate knowledge and 4(13.2%) were joint family moderately knowledge.
- Among 30 adolescents 9(30.%) of adolescents are having 7 days menstruation inadequate knowledge and 14(46.6%) were 5 days menstruation adequate knowledge.

Frequency and percentage distribution of adolescent girl's knowledge score on Iron deficiency anaemia.

The table shows that 10(33.3%) respondents answered correctly regarding anaemia 8 (26.6%) respondents answered correctly regarding the normal value of haemoglobin in male , 11(36.6%) respondents answered correctly regarding the normal value of haemoglobin in female's 10(33.3%) respondents answered correctly regarding the components 7(23.3%) respondents correctly, regarding cause of Iron deficiency anaemia 4(13.3%) respondents correctly the nails in anaemia persons 5(16.6%) respondents correctly regarding stool 10(33.3%) respondents answered correctly.

Frequency and percentage distribution of adolescent girls knowledge score on diagnostic findings of Iron deficiency anaemia

Reveal that regarding diagnostic findings for anaemia 8(26.6%) respondents correctly regarding manually detect anaemia 4(13.3%) respondents answered correctly regarding laboratory 5(16.6%) respondents correctly regarding administration of dextrose 4(13.3%) respondent's correctly regarding severe complication of anaemia 6(20%) respondents correctly.

Frequency and percentage distribution of adolescent girl's knowledge score on Iron supplementation.

Reveal that regarding usual Iron supplementation 6(20%) respondents correctly regarding correct time for toeing iron 8(26.6%) respondents correctly. Regarding prevented of anaemia 15(50%) respondents correctly regarding absorption of iron in 15(50%) respondents correctly. Regarding vit-c is rich in 10(33.33%)

REFERENCES

1. Brunner and Siddarths (2001) text book of medical and surgical nursing 10th edition, Lippincott Philadelphia publications, Newyork. PP No. 877-885.
2. Black and Hawk (2007) Text book of Medical and Surgical Nursing 7th edition Elsevier advision of red Elsevier India private limited New Delhi.

respondents correctly, regarding rich food sources in iron 15(50%) respondents correctly regarding food source. Rich in vit-C 10(33.3%) respondents correctly.

SUMMARY AND RECOMMENDATION

Summary

A study to assess the knowledge regarding Iron deficiency anaemia among adolescent girls in selected junior College at Hyderabad .

A study was conducted from 10.08.2015 to 15.08.2015 at selected Junior College at Hyderabad . 30 samples were selected by using convenient sampling method.

Time instrument used consists of two parts part I Consist of demographic variables and Part II Consists of 25 questions on Iron deficiency anaemia.

Major Findings of the Study

- Out of 30 adolescents most of people 17(56.3%) had inadequate knowledge belongs to the age group of 14-15 years less people 4(13.2%) had moderately adequate knowledge coming under the age group of 16-17 years.
- Out of 30 adolescents 22(73.3%) were Hindu 2(6.6%) were belongs to Muslim 6(20%) were Christian..
- Out of 30 adolescents most of the people 14(46.21%) were non-vegetarian had inadequate knowledge and less people 4(13.2%) were vegetarians had moderately adequate knowledge.
- Out of 30 adolescents 16(56.6%) were nuclear family were inadequate knowledge and 2(6.6%) were joint family moderately knowledge.

Recommendation

- Manual on Iron deficiency anaemia can be prepared and given to adolescent girls in selected Junior College.
- Educational programme on Iron deficiency anaemia can be conducted to adolescent girls in selected Junior College ,Andhrapradesh.
- Adolescents are motivated to use health care service available in their area.

Limitations

1. The sample size was limited to 30 adolescents girls
2. The study was limited to adolescents girls who can understand and speak Telugu or English

Suggestion for further study

- A similar study can be undertaken with a large sample
- A study can be conducted as structured teaching programme



3. Basvanthappa BT (2007) Text book of Nursing 2nd edition Jaypee Brothers Medical publishers (P) Ltd, New Delhi P.P.No.437-442.
4. Kadar Parahoo (2006) Text book of Nursing research 2nd edition published by palgrae machilan, New Delhi
5. Polit Beck (2006) Text book of Nursing research principles and methods 7th edition Wolter's Kluver (India) Pvt Ltd, New Delhi. P.No.139-599.
6. Potter Perry (2006) Fundamentals of Nursing, 16th edition Elsevier al division of reed Elsevier India Private limited New Delhi, P.No.90-92.
7. Shafer's (2000) Text book of medical and surgical nursing 7th edition BI publication Pvt Ltd, Newyork T.Bhaskar Rao 2005, text book of research methodology 2nd edition paras medical publisher, Hyderabad.

