



A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING PREVENTION OF ANEMIA AMONG ADOLESCENT GIRLS IN SELECTED COMMUNITY AREAS, OF GWALIOR

Uma Shankar¹, Sudharani B Banappagoudar^{2*}, Ambali Pancholi³

MSc Community Health Nursing Scholar School of Nursing Science, ITM University, Gwalior (MP)¹,

*Professor, School of Nursing Science, ITM University, Gwalior (MP)²,

Assistant Professor, School of Nursing Science, ITM University, Gwalior (MP)³

Email- umashankardlp1997@gmail.com¹, sudharani.sons@itmuni.ac.in², ambalipancholi.sons@itmuni.ac.in³

*Corresponding Author-Prof. Dr Sudharani B Banappagoudar, Professor, School of Nursing Science, ITM

University, Gwalior (MP), [Email-sudharani.sons@itmuni.ac.in](mailto:sudharani.sons@itmuni.ac.in) ORCID-0000-0002-7259-769X

Abstract

Background:

Background of the Study:

Anemia is a major public health problem throughout the world, particularly for women of reproductive age in developing country. As per district level health survey prevalence of anemia in adolescent girls is very high 72.6% in India with prevalence of severe anemia among them much higher 21.1% than that in pre-school children 2.1% in adolescent girls, educational or economic status does not seem to make much of a difference in terms of prevalence of anemia. Prevention, detection or management of anemia in adolescent girls has till now not received much attention. It is imperative to screen them from anemia and treat them.

Statement of the problem:

“A descriptive study to assess the knowledge regarding prevention of anemia among adolescent girls in selected community areas, of Gwalior”

Objectives of the Study:

1. To assess the knowledge of adolescent girls regarding prevention of anemia.
2. To associate the level of knowledge regarding prevention of anemia with selected demographic variables.

Hypothesis:

H₁: There is a significant association between the level of knowledge and selected variables of adolescent girls regarding prevention of anemia.

Conceptual frame work:

The conceptual frame work of the present study was developed by investigator based on Modified from Revised Rosenstock's Becker's health belief model (1978).

Methodology:

A descriptive survey research approach was selected for the study to assess the knowledge of adolescent girls regarding prevention of anemia the study was carried out in selected areas of Gwalior with sample size of 100. This sample was selected by using simple random sampling technique. A structure interview schedule was prepared and used for data collection of pilot and main study. Reliability of tool was checked by split half technique and its value was found to be reliable. The data collected was organized and analyzed according to the objectives of study using descriptive and inferential statistics.

Major Findings and Results:

- Write the maximum number of clients 64.0% where in the age group of 16-18 years.
- The majority of the subjects 43% were Hindu.
- Most of the girls 43% were illiterates.
- Majority 46% of the girl's family income was about Rs. 4001-8000.
- The maximum no of girls 69% were attained menarche at age of 12-13 years.
- The maximum no of girl's family members 74% of not having anemia.
- The majority 68% of the girls belongs to joint family.
- The majority 64% of the girls are non-vegetarian.
- Out of 100 adolescent girls 28% received the information through mass media.
- Majority 66% of girls had moderately adequate knowledge 34% had inadequate knowledge and none of them had adequate knowledge on prevention of anemia.

- There was a statistically significant association found between the level of knowledge and demographic variables. Such as age, religion, educational background at $p < 0.05$ level.

Conclusion:

The results revealed that majority 55% of the subjects had moderately adequate knowledge with regards to prevention of anemia. The study described that there was a significant association found between the level of knowledge of girls with their demographic variables such educational back ground, dietary pattern and type of family. Based on the finding of the study, recommendation where drawn for nursing education, service, and administration. Therefore that, findings revealed that there is inadequate knowledge among adolescent girls on prevention of anemia. Hence, the individuals in community as well as hospital could be given information guide sheet repeatedly.

DOI: 10.48047/ecb/2023.12.si5a.0270

INTRODUCTION

Anemia is a condition in which the number of red blood cells or the amount of hemoglobin is low. Red blood cells contain hemoglobin protein that it enables them to carry oxygen from the lungs and deliver it to all parts of the body. When the number of red blood cells is reduced or the amount of hemoglobin in them is low, the blood cannot carry an adequate supply of oxygen. An inadequate supply of oxygen in the tissues produces the symptoms of anemia. Even there are many blood disorders; Iron deficiency anemia is most prevalent nutritional disorders in the world today. Iron is a necessary mineral for body function and good health. Every red blood cell in the body contains iron in its hemoglobin, the pigment that carries oxygen to the tissues from the lungs. But a lack of iron in the blood can lead to iron-deficiency anemia, which is a very common nutritional deficiency in children & adolescents.¹

Adolescence has been defined by the world health organization as the period of life spanning the ages between 10 to 19 years. This is the formative period of life when the maximum amount of physical, psychological, and behavioral changes take place. That is a vulnerable period in the human life cycle for the development of nutritional anemia, which has been constantly neglected by public health programmers. Adolescent girls are more likely to be a victim due to various reasons. In a family with limited resources, the female child is more likely to be neglected. She is deprived of good food and education and is utilized as an extra working hand to carry out the house hold chores. The added burden of menstrual blood loss, normal or abnormal precipitates the crises too often.²

Adolescents constitute about 25% of the population and form an important physical group whose nutritional needs demand special attention. Adolescence is a period of rapid growth, weight gain and blood volume expansion. The overall iron requirement of the body increases during this period. During adolescent period, the risk of iron deficiency and anemia among boys and girls appears to be more due to growth spurt and in girls it remains as such during their reproductive life among adolescent girls have shown that the prevalence of anemia ranges from 22.00-96% in India.³

During adolescence, (i.e. 10-19 years of age,

anemia is estimated to be the greatest nutritional problem. Anemia in adolescents and young adults can have negative effects on their cognitive performance and growth. If pregnancy occurs during adolescence, anemia can not only increase maternal morbidity and mortality, but increase the incidence of poor birth outcomes in the infant (e.g., low birth weight, and prematurity) and also negatively impact infant iron status. Furthermore through its effects on cognitive and work performance, anemia can impact current and future economic productivity: the productivity benefits for correcting anemia in adults range from 5-17% for manual work, and 4% for all other work. At all levels, the negative effects of anemia during adolescence justify public health action; unfortunately because initiatives to prevent anemia commonly target infants, young children and pregnant and lactating women, and not necessarily adolescents the needs of adolescents may remain unmet, and the consequences of anemia in adolescents.⁴

Iron – deficiency anemia is a serious public – health concern in most developing countries. Iron deficiency anemia is estimated to cause 591,000 perinatal deaths and 115,000 maternal deaths globally. When direct sequelae of iron deficiency anemia are added, the global burden attributed to iron deficiency anemia amounts to 841,000 deaths and 35,057,000 disability adjusted life years. In 1993, the world health organization (WHO) also recommended actions for the development of assessment, advocacy, prevention, and control initiatives, in most countries, to reduce anemia among adolescent girls.⁵

Anemia continues to be a major public health problem worldwide, particularly among females of reproductive age in developing country settings. In 1992, World Health Organization global estimates of anemia prevalence averaged 56%, with a range of 35–75% depending on geographic location World Health Organization 1992 (WHO, 1992). Prevalence of anemia in South Asia is among the highest in the world, mirroring overall high rates of malnutrition. In India, recent nationally representative data from the National Family Health Survey 1998/1999 (International Institute of Population Sciences and ORC Macro 2000) on anemia of women of reproductive age describe the magnitude of the problem. More than one third of Indian women have a body mass index (BMI) <18.5 kg/m²,

reflecting chronic energy and micronutrient deficit. The prevalence of anemia among all women in the Indian sample is 52%. Fifteen percent of these women are classified as moderately anemic (Hb 70–99 g/l) and 2% as severely anemic (Hb <70 g/l). While there are regional differences, prevalence rates across the states are remarkably similar, reflecting underlying determinants that include diets low in heme-iron and high in phytates, high levels of malaria and other infectious diseases, and frequent reproductive cycling that decreases iron stores.⁶

Anemia remains a major cause of mortality and morbidity in developing countries where resources to determine the underlying etiology remain poor. There are three basic mechanisms for developing anemia, namely: (i) blood loss (hemorrhage); (ii) decreased production of red cells; and (iii) increased destruction of red cells (hemolysis). In this review on the treatment of chronic anemia, the causes of chronic anemia that are of major public health importance in developing countries are discussed. These include nutritional deficiencies such as of iron, vitamin B₁₂ and folate; inflammation resulting from chronic diseases like tuberculosis and human immunodeficiency virus; parasitic diseases like hookworm, schistosomiasis; and hemoglobinopathies, including sickle cell disease and glucose-6-phosphate dehydrogenase deficiency. Lastly, a practical approach to the diagnosis of chronic anemia is presented.⁷

Adolescents are considered to be a nutritionally vulnerable segment of the population. Due to enhanced growth during adolescence, the requirement of some minerals is of paramount importance. A rapid growth rate combined with a marginal nutrient intake increases the risk of nutritional deficiencies in this population. Micronutrients such as iron and zinc are essential trace elements involved in the high growth rates of adolescents. Poor nutritional status during adolescent is an important determinant of health outcomes at a later stage of life. Therefore, attention should be given to adolescent health. Results of these studies particularly confirmed the higher prevalence of anaemia and iron deficiency along with some other micronutrient deficiencies. Findings of this study could be critical to formulate the appropriate intervention programmes to solve nutritional problems among adolescent college

girls.⁸

Need for the Study

Adolescence is a period of rapid physical growth calling for adequate nutrient intake to meet body growth requirement. It is also a period of emotional and psychological changes during which there is a tendency to reject conventional dietary habits. Adolescent nutritional problems are common throughout the country. They have to encounter a series of serious nutritional challenges not only affecting their growth and development but also their livelihood as adults. Yet adolescents remain a largely neglected and hard to reach population especially girls. Thus it is not surprising that adolescent girl population who are “mother to be” is considered as the most important section on which the future of nation depends. (Measham, A.R., 2000 AND Rao, S., 1996) the poor nutritional status of girls has important implication in terms of physical work capacity and adverse reproductive outcome. (WHO 1998) Realizing the adversity of the problem several recommendations were made by WHO in order to bring down the nutrition related problems of adolescent population and one of these emphasizes, ‘Mass information and awareness programmes are needed to alert government and communities about the importance of health and nutrition’.¹²

METHODOLOGY

This chapter deals with the methodology adopted for the study. The methodology of the investigation is of vital importance. The methodology of research indicated the general pattern of organizing the procedure it gathers valid and reliable data for the problem under the investigation. This chapter deals with description of methodology and different steps, which are undertaken for collecting and organizing data for investigation. It includes research design, research approach, research setting, population, sample, sampling technique, development and description of the tool, pilot study, data collection and plan for data analysis and interpretation and ethical implication in the study. Research approach is the most significant part of any research. The appropriate choice of the research approach depends upon the research study, which has been undertaken. An explorative survey research approach was considered the best to assess the knowledge of adolescent girls to prevention of anemia. A research overall plan for obtaining answers to the research questions or for testing

the research hypothesis is referred to as the research design. A descriptive design was adopted for the study. In the study the base measure was structured interview schedule to assess the knowledge of adolescent girls regarding prevention of anemia.

MATERIALS AND METHODS:

In this study a structured interview schedule was prepared and used to assess the knowledge of adolescent girls on prevention of anemia. It has felt that face to face contact would encourage the adolescent girls to give prompt information and will help in collecting data from illiterate clients. It comprised of demographic characteristics of the adolescent girls. It

comprised of structured interview schedule on knowledge regarding prevention anemia. It comprised of demographic characteristics of the adolescent girls such as age, religion, family income, family history of anemia, Age of menarche, education, type of family, dietary pattern and source of information. It consisted of five divided section of 35 multiple choice questions on anemia and its prevention with a single correct answer. Every correct answer was accorded a score of one (1) and every incorrect answered questions was accorded a score of zero (0). The maximum score on knowledge questionnaire was 35. The divided sections and interpreted level of knowledge scores were distributed.

Table-1.1 Frequency and percentage distribution of adolescent girls by age, religion, family income, family history anemia and age of menarche.

n=100

S.no	Demographic variables	Frequency	Percentage
1.	Age in years		
	a) 13-15	36	36
	b) 16-18	64	64
2.	Religion		
	a) Hindu	43	43
	b) Muslim	26	26
	c) Christian	31	31
3.	Family income		
	a) 1000-4000	23	23
	b) 4001-8000	46	46
	c) 8001-12000	19	19
	d) <12001	12	12
4.	Family history of anemia		
	a) Yes	26	26
	b) No	74	74
5.	Age of menarche		
	a) 10-11years	29	29
	b) 12-13years	62	62
	c) 14&above	2	2

In relation to age, majority 64% (64) of the subjects were belongs to the age group of 16-18 years, followed by 36% (36) of them were in the age group of 13-15 years.

In relation to religion, majority 43% (43) of them were belongs to Hindus, followed by 26% (26) of them were Muslims and the remaining 31% (31) of them were Christians.

In relation to family income, 46% (46) of them were earning 4001-8000, 23% (23) of them earning 1000-4000, 19% (19) of them were earning 8001-12000, and 12% (12) of them

were earning above 12001.

With regards to family history of anemia, majority 74% (74) of them were family members are not having anemia and only 26% (26) of them were family members are having anemia.

In relation to age menarche, majority 69% (69) of the subjects were belongs to the group of 12-13 years, followed by 29% (29) of them were in the age group of 10-11 years and 2% (2) of them were in the age group of above 14 years.

Table-1.2 Frequency and percentage distribution of adolescent girls by Educational background, type of family, dietary pattern, and source of information.

n=100

Sl.no	Demographic variables	Frequency	Percentage
6.	Educational background	43	43
	a) Illiterate	21	21
	b) Primary education	10	10
	c) Secondary education	26	26
	d) Higher education.		
7.	Type of family		
	a) Joint family	68	68
	b) Nuclear family	32	32
8.	Dietary pattern		
	a) Non vegetarian	64	64
	b) Vegetarian	36	36
9.	Source of information		
	a) Mass media	32	32
	b) Book	22	22
	c) Peer group	28	28
	d) Health personnel	18	18

From the above tables, the present study shows the frequency and percentage distribution in relation to demographic variables Educational background, type of family, dietary pattern, and source of information.

In relation to educational background, majority 43% (43) of them were illiterate, followed by 26% (26) of them were higher education and the remaining them were primary education and 10% (10) of them were secondary education.

With regards to type of family, majority 68% (68) of subjects were belongs to joint family

and 32% (32) of subjects were nuclear family.

In relation to dietary pattern, majority 64% (64) of the adolescent girls were non- vegetarian and 36% (36) of the adolescent girls were vegetarian

With regards to source of information, majority 32% (32) of them were got information from mass media, 28% (28) of them were got information from peer groups, 22% (22) of them were got information from books and 18% (18) of them were got information from health care professionals.

Table-2.1 Frequency and percentage distribution of level of knowledge of adolescent girls on prevention of anemia.

n=100

S. No	Level of knowledge	Frequency	Percentages
1.	<50% (inadequate)	34	34
2.	51-75% (moderately)	66	66
3.	>75% (adequate)	0	0
	Total	100	100

The above table depicts that majority 66% (66) of adolescent girls had moderately adequate knowledge, 34% (34) had inadequate

knowledge and none of them had adequate knowledge on prevention of anemia.

Table-2.2 Mean, standard deviation and mean score percentage of level of knowledge of adolescent girls on prevention of anemia.

n=100

S.no	Knowledge aspect	Items	Maximum Score	Respondents knowledge		
				Mean	Mean Score	S.D
1.	General information	5	5	3.83	62.0	0.943
2.	Cause of anemia	6	6	3.32	60.0	0.894
3.	Clinical features of anemia	5	5	2.63	52.6	1.491
4.	Treatment of anemia	7	7	3.96	56.5	1.019
5.	Prevention of anemia	12	12	5.35	44.5	1.456
	Total	35	35	18.64	53.26	2.659

The above table represents the mean, standard deviation and mean difference of knowledge aspects of adolescent girls. It revealed that the subjects had a maximum mean of 5.35 with a standard deviation of 1.4 and means percentage of 44.5 regarding prevention of anemia and minimum mean 2.63 with the standard deviation of 1.4 and mean percentage of 52.6 for

clinical features. Regarding general information the mean score was 3.1 with standard deviation of 0.9 and mean percentage was 62.0, 3.6 mean score with standard deviation of 0.8 with 60.0 mean percentage on cause of anemia.

The subjects obtained mean score of 3.9 with standard deviation of 1.0 with mean percentage of 56.5 for treatment of anemia

Table-3.1 Association of levels of knowledge of adolescent girls with their age, religion, family income, family history of anemia, age of menarche and education.

n=100

S. no	Demographic Variable	<50%		51-75%		df	Values
		F	%	F	%		
1.	Age					1	$\chi^2=0.137$ p>0.05
	a.13-15	15	41.6	21	58.4		
	b.16-18	29	45.3	35	54.7		
2.	Religion					4	$\chi^2=0.581$ p>0.05
	a. Hindu	20	46.5	23	53.5		
	b. Muslim	12	16.2	14	53.8		
	c. Christian	19	61.3	12	38.7		
3.	Family income					4	$\chi^2=0.377$ p>0.05
	a.1000-4000	14	56.0	11	44.0		
	b.4001-8000	22	47.0	24	53.0		
	c.8001-12000	15	52.0	14	52.0		
	d.<12001	0	0	0	0		
4.	Family history of anemia					1	$\chi^2=0.329$ p>0.05
	a. Yes	14	53.8	12	46.2		
	b. No	35	42.3	39	57.7		
5.	Age of menarche					4	$\chi^2=3.205$ p>0.05
	a.10-11 years	17	58.7	12	41.3		
	b.12-13 years	32	46.4	37	53.6		
	c.14 and above	0	0	2	100		
6.	Educational Back ground					3	$\chi^2=6.531$ *P<0.05
	a. Illiterate	19	44.2	24	55.8		
	b. Primary education	12	57.2	9	42.8		
	c. Secondary education	8	80.0	2	20.0		
	d. Higher education	2	23.1	20	76.9		

*Significant at 5% level.

The above table represents the association of the level of knowledge of adolescent girls with demographic variables of Age, Religion, family income, family history of anemia, age of menarche, educational background. The variable such as educational background ($\chi^2=11.260$,

Df=1), were statistically significant at 5% level $p<0.05$. The other variables such as age, religion, and family income, family history of anemia, and age of menarche did not show significant association with the level of knowledge of adolescent girls.

Table-3.2 Association of level of knowledge with their type of family, dietary pattern, source of information.

n=100

S. no	Demographic Variable	<50%		51-75%		df	Values
		F	%	F	%		
1.	Type of family					1	$\chi^2=6.553$ *P<0.05
	a. Joint family	42	61.7	26	38.3		
	b. Nuclear family	11	34.4	21	65.6		
2.	Dietary pattern					1	$\chi^2=1.900$ *P<0.05
	a. Non vegetarian	40	62.5	24	37.5		
	b. Vegetarian	14	38.8	22	61.2		
3.	Source of information					3	$\chi^2=3.033$ p>0.05
	a. Mass	12	37.5	20	62.5		
	b. Book	8	63.6	14	36.4		
	c. Peer group	16	57.2	12	42.8		
	d. Health personnel	8	44.5	10	55.5		

*Significant at 5% level.

The above table represents the association of the level of knowledge of adolescent girls with the demographic variables of type of family, dietary pattern and source of information. The variables such as type of family ($\chi^2=6.553$, Df=1) and dietary pattern ($\chi^2=1.900$, Df=1) was statistically significant at 5% level. $p < 0.05$ and rest of the variables such as source of information did not show significant association with the level of knowledge of adolescent girls.

So, it is evidenced that the adolescent girls knowledge regarding prevention of anemia is influenced by education, type of family and dietary pattern.

DISCUSSION

The present study was conducted to assess the knowledge of adolescent girls regarding prevention of anemia in selected areas, Gwalior. The non experimental, descriptive design was adopted for the present study and simple random sampling technique was used to select the samples. The data was collected from 100 adolescent girls by using structured interview schedule. The findings of the study have been discussed with reference to the objectives and findings of the other studies

DEMOGRAPHIC VARIABLES OF ADOLESCENT GIRLS

The characteristics of the demographic variables of girls described in terms of the frequency and percentage distribution which showed that majority 64% of the adolescent girls were in the age group of 16-18 years. In relation to religion, out of 100 adolescent girls, maximum numbers of subjects 43% were Hindus, 46% were family income was about

Rs.4001-8000, with regard to family history of anemia, maximum numbers subjects family member 74% are not having anemia, 43% of them are illiterate, maximum numbers them had received the information through mass media

The first objective was to assess the knowledge of Adolescent girl regarding prevention of anemia

The level of knowledge shows that, out of 100 adolescent girls, majoring 66% (66) of adolescent girls had moderately adequate knowledge on prevention of anemia, 34% had inadequate knowledge. The mean for over all knowledge of adolescent girls was 18.64 with $80=3.6$. The highest mean score knowledge was 5.35 with $30=1.4$ for prevention of anemia and lowest mean score knowledge was 2.63 with $80=1.4$ for clinical manifestation. This decrease in the total knowledge indicates that the adolescent girl needs more information on prevention of anemia.

Certain research study also shows that adolescent girls are lacking knowledge regarding prevention of anemia: A study to assess the level of knowledge about causes, prevention and treatment of Iron deficiency anemia among women of reproductive age in Hubei province, china. Awareness regarding were surveyed for 77.9% women (n=300) were aware of the team JDA, with highest proportion of 88.1% falling in age group 25-35 years. Awareness regarding IDA is community and is found to be increasing with the passage of time with exploration & accessibility to media & health care facilities.

The second objectives was to associate

the level of Knowledge of adolescent girls with selected demographic Variables

Age- the maximum number of clients 64.0% in the age group of 16-18 years, followed by 36% of them were in the age group of 13-15 years. The chi- Square value was 0.137 in knowledge which is less than the table value of chi-square. Hence there is nonsignificant association between age and knowledge score.

Religion-The majority of the subjects 43% (43) of them were Muslims and the remaining 31% (31) of them were Christians. The chi-Square value was 0.137 in knowledge which is less than the table value of chi-square. Hence there is nonsignificant association between religion and knowledge score.

In relation to family income, 46% (46) of them were earning 4001-8000, 23% (23) of them earning 1000-4000, 19% (19) of them were earning 8001- 12000, and 12% (12) of them were earning above 12001. The chi- Square value was 0.377 in knowledge which is less than the table value of chi- square. Hence there is nonsignificant association between family income and knowledge score.

With regards to family history of anemia, majority 74% (74) of them were family members are not having anemia and only 26% (26) of them were family members are having anemia. The chi- Square value was 0.329 in knowledge which is less than the table value of chi-square. Hence there is nonsignificant association between family history of anemia and knowledge score.

In relation to age menarche, majority 69% (69) of the subjects were belong to the group of 12-13 years, followed by 29% (29) of them were in the age group of 10-11 years and 2% (2) of them were in the age group of above 14 years. The chi- Square value was 3.205 in knowledge which is less than the table value of chi-square. Hence there is nonsignificant association between Age of menarche and knowledge score.

In relation to educational background, majority 43% (43) of them were illiterate, followed by 26% (26) of them were higher education and the remaining them were primary education and 10% (10) of them were secondary education. The chi- Square value was 6.531 in knowledge which is less than the table value of

chi-square. **Hence there is significant association between educational background and knowledge score**

With regards to type of family, majority 68% (68) of subjects were belongs to joint family and 32% (32) of subjects were nuclear family. The chi- Square value was 6.553 in knowledge which is less than the table value of chi-square. **Hence there is significant association between type of family and knowledge score**

In relation to dietary pattern, majority 64% (64) of the adolescent girls were non-vegetarian and 36% (36) of the adolescent girls were vegetarian. The chi- Square value was 1.900 in knowledge which is less than the table value of chi- square. **Hence there is significant association between type of dietary pattern and knowledge score**

With regards to source of information, majority 32% (32) of them were got information from mass media, 28% (28) of them were got information from peer groups, 22% (22) of them were got information from books and 18% (18) of them were got information from health care professionals. The chi- Square value was 1.900 in knowledge which is less than the table value of chi-square. Hence there is nonsignificant association between source of information and knowledge score

Association of demographic variables with the level of knowledge was done using chi-square test. There was statistically significant association found between level of knowledge of girls with demographic variables such as educational states, dietary pattern, and type of family at <0.05 level. The rest of the variables such as age, religion, family income, history of anemia and source of information did not show any significant association with knowledge of adolescent girls. This indicates the level of knowledge of adolescent girls varies according to educational background, dietary pattern and type of family. **Hence the research hypothesis was accepted.**

Some supportive findings for this include:

Across section conducted regarding to assess the knowledge of a anemia among adolescent girls along with associated demographic variables 15 randomly selected urban slums of north zone of Ahmadabad city. 1295 randomly selected girls in the age group of 6 to 18 years

.the study variables are Hb%, age, parent education, occupation, diet, socio economic status knowledge about anemia. The result shown that the knowledge of anemia was 81.8% and had significant association with variable. It concluded that knowledge of anemia necessary pragmatic intervention to improve the dietary pattern intake nutritional supplement of iron and folic acid tablets.

This chapter deals with the findings of the objectives in comparison with supportive studies, major finding of the study. From this study it can be summarized that the adolescent girls are lacking knowledge regarding prevention of anemia. And the findings it is also found that there is significant relationship between knowledge and selected demographic variables.

6. CONCLUSION

Education enlightens the darkness of the life through the public awareness, increases knowledge and brings change in the people's unhealthy practices. The major goal of nursing practices is to impart the knowledge and encourage the healthy practices.

The present study assessed the knowledge of adolescent girls regarding prevention of Anemia.

On the basis of findings of the study the following conclusions were made:

The results revealed that majority 66% of the subjects had moderately adequate knowledge with regards to prevention of Anemia

The study disclosed that there was a significant association found between the level of knowledge of adolescent girls with their demographic variables such as educational background, Dietary pattern and type of family. All these indicated that effective health education on prevention and management of anemia must be instituted in all communities with the view to bring about public awareness. This further helps to reduction in the morbidity and mortality rates in the country.

References

1. DE. Myer, Dallman P, et.al. preventing and controlling iron deficiency anemia through primary health care. 1989
2. Banappagoudar SB, Vasantha kumari Sundararajan D, Kangeswari P. CLINICAL APPROACH OF BIO-MEDICAL WASTE MANAGEMENT IN INDIA DURING COVID 19 PANDAMIC BREAKOUT-A

CROSS SECTIONAL STUDY. NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal| NVEO. 2021 Dec 18:10941-7.

3. Sanjeev. M. chaudhary, Vasant. R. dgage. A study of anemia adolescent females in the urban areas of Nagpur, Indian journal of community medicine. 2008;33(4):243-245.
4. Sindhu. S, Kantal kumar. prevalence of anemia adolescent girls of scheduled caste community of Punjab. 2005;7(4):265-267.
5. Stolfus. RJ, Dreyfuss ML. Anemia among adolescent and young adult women in latin. America and Caribbean.:
6. Deshmukh P.R, Garg B.S. effectiveness of weekly supplementation of iron to control anemia among adolescent girls of Nashik. 2008;26(1):74-78.
7. ME Bentley and PL Griffiths. The burden of anemia among women in India, European journal of clinical nutrition. 2003;57(1):52-60. Available from URL: <http://www.nature.com/ejan>
8. Banappagoudar SB. EFFECTIVENESS OF MIND MAPPING VS LECTURE METHOD ON LEARNING REGARDING PHYSIOLOGICAL CHANGES DURING PREGNANCY AMONG NURSING STUDENTS IN OJASWINI COLLEGE OF NURSING DAMOH. Indian Journal of Applied Research. 2020;10(12).
9. Kamija. S. Approaches to treating chronic anemia in developing countries, Transfusion alter Transfusion Med. 2008;10(2):75-85. Available from: URL: <http://www.medscape.com>
10. Dr sudharani b banappagoudar. Life style modifications in preventing-polycystic ovarian syndrome. Mukt Shabd Journal Volume 10/Issue-6/June 2021 P-299-309
11. Admed F, Khan MR. Anemia and iron deficiency among adolescent school girls. 2000;54(1):678-83.
12. Banappagoudar SB, Mayank D, Ravi DN, Kanna RK, Kurian NK. Anti-Bacterial Sanitary Napkin Using Biomaterial Application. NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal| NVEO. 2021 Dec 9:12254-63.
13. Kamla. Raj. Impact of nutrition education on nutrient adequacy of adolescent girls. 2007;1(1):51-55.
14. PRAKASH U, BANAPPAGOUDAR SB. "EFFECTIVENESS OF HEALTH EDUCATION ON KNOWLEDGE REGARDING PREVENTION AND MANAGEMENT OF DIARRHEA AMONG

- MOTHERS OF UNDER-FIVE CHILDREN IN THE SELECTED RURAL AREA OF JHANSI"-A CROSS-SECTIONAL HUMAN STUDY. UTTAR PRADESH JOURNAL OF ZOOLOGY. 2021 Dec 13:222-8.
15. Sudharani Banappagoudar. A Study to Assess the Effectiveness of Structured Teaching Programme on Level of Knowledge and Attitude Regarding Immunization among the Mothers of under Five Children in Selected Rural Area of Damoh(MP). International Journal of Multidisciplinary Educational Research, 2020; 9(6(10)), 126–136.
<https://doi.org/10.5281/zenodo.5440613>
 16. Banappagoudar MS, Pillai DS. Plan of Action in Combating Myths related to Menstruation in context with Indian Society. Int J Mult Discip Educ Res. 2020;9(6):137-41.
 17. Sudharani Banappagoudar, & Dr Sreemini Pillai. (2020). "REVIEW ON MENSTRUAL HYGIENE MANAGEMENT". International Journal of Multidisciplinary Educational Research, 9(6(10)), 142–146.
<https://doi.org/10.5281/zenodo.5440871>
 18. Sudharani Banappagoudar Dr Shreemani Pillai & Dr Maya E Patlia. Descriptive Study to assess the knowledge of females regarding Breast Self Examination, and to find out relationship between socio demographic variables and breast self-exam. Journal of nursing practice and education (JNPE), 6, March 2020(1), 04–06.
<https://doi.org/10.5281/zenodo.5243125>