

# A Study to Evaluate the Effectiveness of the Planned Teaching Programme on Knowledge and Level of Anemia Among Reproductive Age Group Women (15-35 Years) and Evaluate the Care Given to Them in Achrol Village of Jaipur District

Mr Narayanswamy M.<sup>1</sup>, Dr Jayalakshmi L.S.<sup>2</sup>

<sup>1</sup>Assistant Professor, NIMS Nursing College, NIMS University, Jaipur PhD Scholar, Geetanjali University, Udaipur

<sup>2</sup>Dean, Geetanjali School & college of Nursing, Udaipur, Rajasthan

**ABSTRACT:** The incidence of Anemia is high especially in underdeveloped countries where nutrition is poor and tropical region where hook worms is endemic. Some epidemiologist calculates that at least one half of world's population suffered from anemia. The study was experimental in nature with one group pre- test post -test design. The health teaching was planned and Iron supplement therapy was given for I month to the females of reproductive age group under the guidance of expertise .The sample of 60 reproductive age (15-35 years) women were selected through non probability purposive sampling technique. The Instruments used for generating necessary data were a structured knowledge questionnaire about anemia among reproductive age group women and structured observational check list to assess the general signs and symptoms and complains of anemia among selected samples. The obtained data was analyzed by using both descriptive and Inferential statistical in terms of mean, standard deviation and 'T' value. Sample characteristics revealed that the age of sample were 21-25 years and all are married. Their educations were primary education and all were house wives. The significant findings of the study were: the subjects gained significantly higher knowledge regarding anemia after exposure to planed health teaching and also significantly better observation or less signs of anemia as measured by observational check list. In the overall and specific content area mean gain score were comparatively higher after exposure to planned health teaching and iron supplement therapy. The finding indicate that planed health teaching and iron supplement therapy is a suitable and effective method of instruction for updating and enhancing the knowledge as well as General symptoms of anemia among reproductive age women.

**Objectives** 1.To assess the knowledge regarding the anemia among reproductive age group. 2.To determine the prevalence of anemia among reproductive age group (15-35 years). 3.To assess the cases of anemia in the selected areas. 4.To implement Iron tablet therapy for the selected group. 5.To impart health education. 6.To evaluate prognosis in the research samples.

**MATERIAL & METHODS** -A quasi experimental approach is used in the study to assess the knowledge and level of anemia among reproductive age group (15 -35 years).

**RESULT-** As regarding to mild Anemia the mean score of pre test was 0.25 where as mean post test score was 0.53. As related to Moderate anemia mean pre test score was 0.5 and mean post test score was 0.26 .as regards to severe anemia mean pre test score was 0.25 and mean post test score was 0.03.

The major finding was no normal hemoglobin level before iron supplements as evidence by 0 per test mean score of Hb where as 0.16 post test Mean scores among the Samples which indicate increase of Hb level after iron supplement therapy.

**DISCUSSION-**The data were collected, analyzed and interpreted in terms of objectives of the study .descriptive and inferential statistics were utilized for the data analysis

## INTRODUCTION

The incidence of anemia is very high in girls and women of developing countries. In India more than half of the total population suffers from anemia. It is estimated that approximately 1.3 billion individuals in the world, suffer from anemia making it one of the most important public health issue on the international agenda. In developing countries, iron deficiency afflicts approximately 2 billion people and is the principle cause of anemia. Anemia is one of the major public health problems in the developing countries affecting mainly the women of child bearing age. In India its prevalence varies from 20% to 97% in different parts of the country.

## Objectives

1. To assess the knowledge regarding the anemia among reproductive age group.
2. To determine the prevalence of anemia among reproductive age group (15-35 years).
3. To assess the cases of anemia in the selected areas.
4. To implement Iron tablet therapy for the selected group.

5. To impart health education.
6. To evaluate prognosis in the research samples.

### HYPOTHESIS:

**H1:** The mean post test knowledge score of the female of reproductive age group ( 15-35 years ) who exposed to health education On Prevalence and treatment of anemia will significantly higher than their mean pretest Knowledge score determined by Structured knowledge questionnaire and observational check list.

**H2:** The mean post test hemoglobin level of the females of reproductive age group may be increase 1-2gm% than the prior to the treatment with iron tablet therapy.

### OPERATIONAL DEFINITIONS:

1. **Experimental:** Something done so that the result may be studied.
2. **Study:** To read about or examine in order to obtain knowledge.
3. **Assess:** To find out importance, value or quality of something.
4. **Anemia:** A state in which hemoglobin level in blood is below the normal range (11 gm %) for the person's age and sex.
5. **Reproductive:** Able to produce offspring of its own type.
6. **Evaluate:** To assess the achievement of stated objectives or goals.
7. **Care:** Feeling of concern for someone or look after one self.

### MATERIAL & METHOD

A quasi experimental approach is used in the study to assess the knowledge and level of anemia among reproductive age group (15 -35 years) .The quasi experimental approach would help the investigator to evaluate the effect of the intervention that is evaluation of care given to anemic females of reproductive age group on the variables that is knowledge and level of Anemia in females of reproductive age group ( 15-35 years). In the survey research one can describe in systematic way the characteristics of population i.e. women in reproductive age from 15 to 35 years at ACHROL village, Jaipur district.

### FINDINGS

The analyzed data were presented under the following headings based on the objectives.

- i. Analysis of data collected on personal information of sample population:
- ii. Analysis and interpretation of data on structured knowledge questionnaire.
- iii. Analysis and interpretation of data on observational check list.
- iv. Variables scores between mean and mean percentage of post test knowledge observation score on anemia.
- v. Analysis and interpretation of pre test and post test Hb level among the experimental group.

#### i. Analysis of data collection on personal information of sample population

**Table 1: Analysis of data collection on personal information of sample population**

N= 60

Sr. No.	Variables	Frequency	Percentage
1	<b>Age</b>		
	• 15-20 years	9	15
	• 21-25 years	22	36.6
	• 26-30 years	19	31.7
	• 31-35 years	10	16.7
2	<b>Marital Status</b>		
	• Married	74	78.3
	• Unmarried	9	15
	• Divorcee	1	1.7
	• Widow	3	5
3	<b>Education Qualification</b>		
	• Illiterate	6	10
	• Primary Education	38	63.3
	• Secondary Education	11	18.3
	• Higher Secondary	4	6.7
	• Graduate	1	1.7

4	<b>Diet</b> • Vegetable • Non Vegetable • Mixed	57	95
		0	0
		3	5
5	<b>Family Income</b> • Less than 1000 Rs. • 1000-3000 Rs. • 3000-6000 Rs. • More than 6000 Rs.	6	10
		37	61.7
		14	23.3
		3	5
6	<b>Type of Family</b> • Single • Joint • Joint Extended • Single Parents	8	13.3
		51	85
		1	1.7
		0	0
7	<b>Occupation</b> • House wife • Labor Work • Service	47	78.3
		12	20
		1	1.7
8	<b>Source Of Information</b> • T.V & Magazines • Relative • Health workers • None	13	21.6
		28	46.7
		15	25
		4	6.7
<b>Total</b>		60	100%

ii. Analysis of knowledge of adolescents regarding knowledge of anemia during pre test and post test.

Table 2: Analysis of knowledge of adolescents regarding knowledge of anemia during pre test and post test.

OVERALL PRETEST KNOWLEDGE SCORE	PRETEST				
	OBT. SCORE	MEAN	MEAN%	SD	S.E. MEAN
	532	8.86	35.46	1.93	0.249

Table No.2 reveals that overall mean knowledge score in the pre test is 35.46% with the standard deviation of 1.93 and standard error mean is 0.249

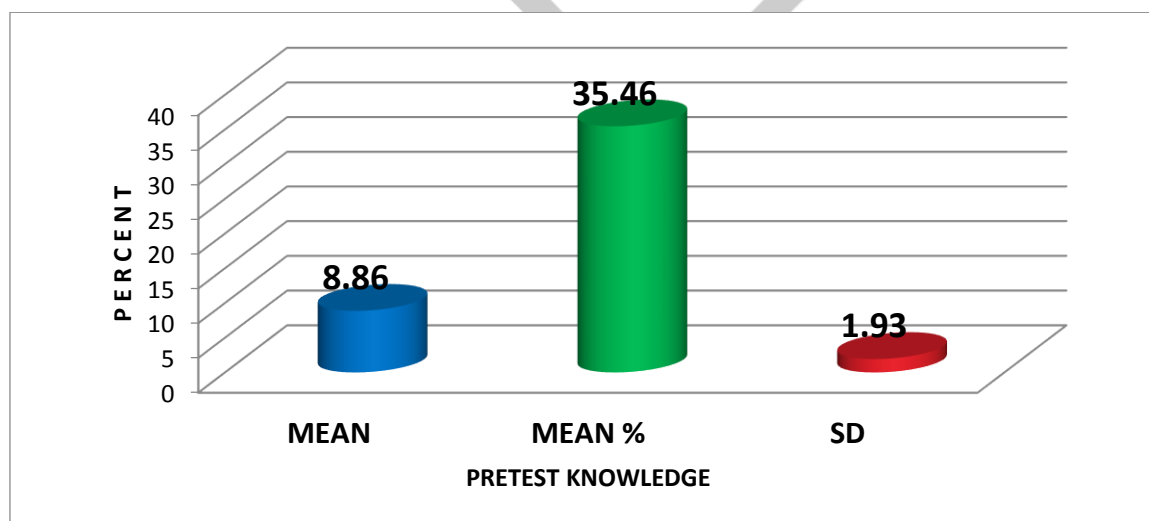
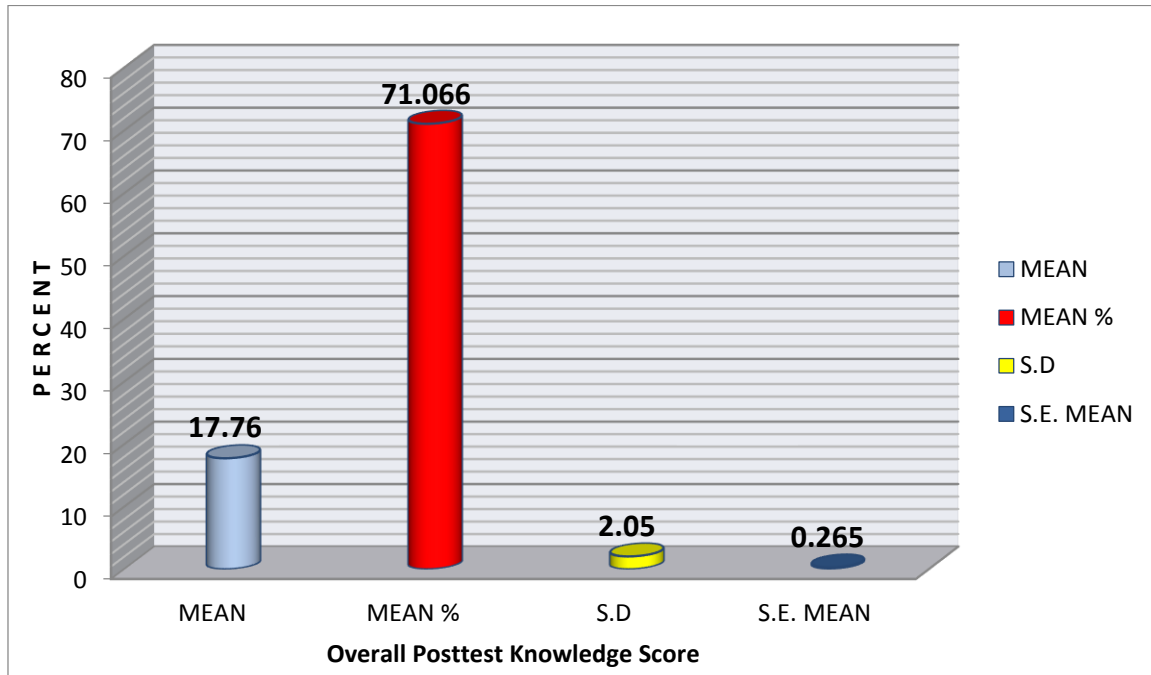


Fig.1: Overall Pretest Knowledge Score

**Table.3: Overall Posttest Knowledge Score**

OVERALL POSTTEST KNOWLEDGE SCORE	PRETEST				
	OBT. SCORE	MEAN	MEAN%	SD	S.E. MEAN
	1066	17.76	71.066	2.06	0.265

Table no. 3 reveals that overall mean knowledge score in the post test is 71.066% with the standard deviation of 2.05



**Fig.2 : Overall Posttest Knowledge Score**

iii. Analysis of observation of adolescents regarding signs of Anemia during pre test and post test.

**Table.4: OVERALL PRE TEST OBSERVATION SCORE**

OVERALL PRE TEST OBSERVATION SCORE	PRETEST					
	No. of Items	Max. Score	Mean	Mean%	S.D	S.E. Mean
	25	25	10.54	42.2	1.40	0.181

Table No. 4 reveals that overall mean observation score in the pre test is 42.2% with the standard deviation of 1.40

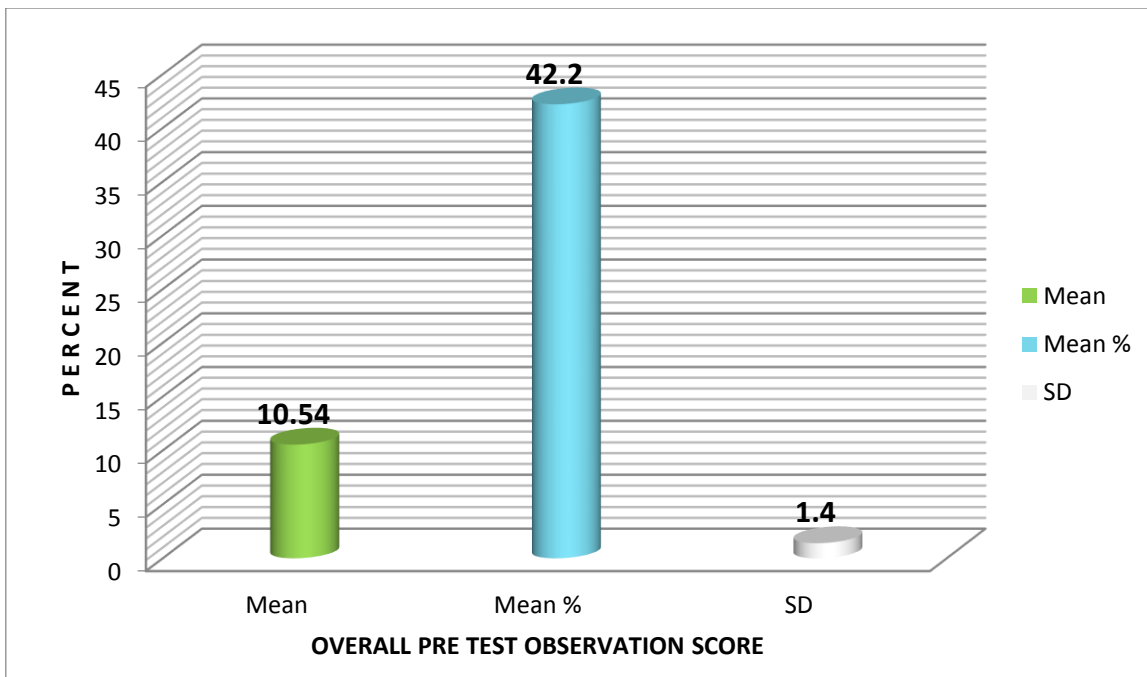


Fig.3: OVERALL PRE TEST OBSERVATION SCORE

Table.5: OVERALL POSTTEST OBSERVATION SCORE

OVERALL POSTTEST OBSERVATION SCORE	PRETEST					
	No. of Items	Max. Score	Mean	Mean%	S.D	S.E. Mean
	25	25	17.71	70.86	1.79	0.231

Table No. 5 reveals that overall mean practice score in the post test is 70.86% with the standard deviation of 1.79.

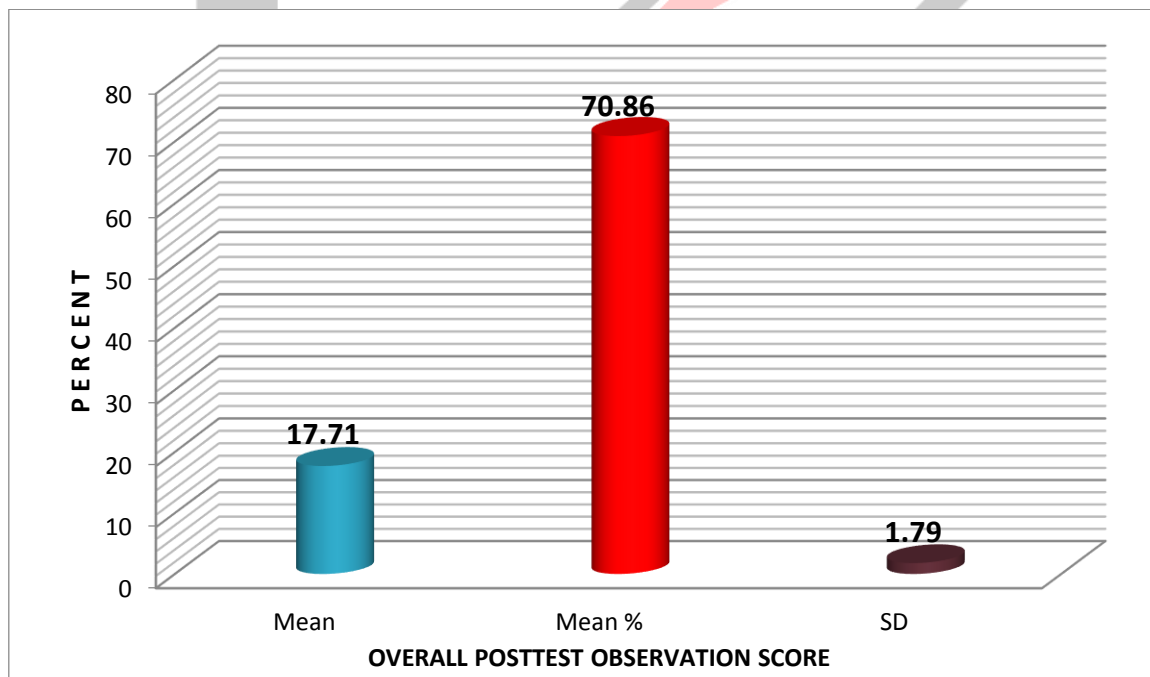


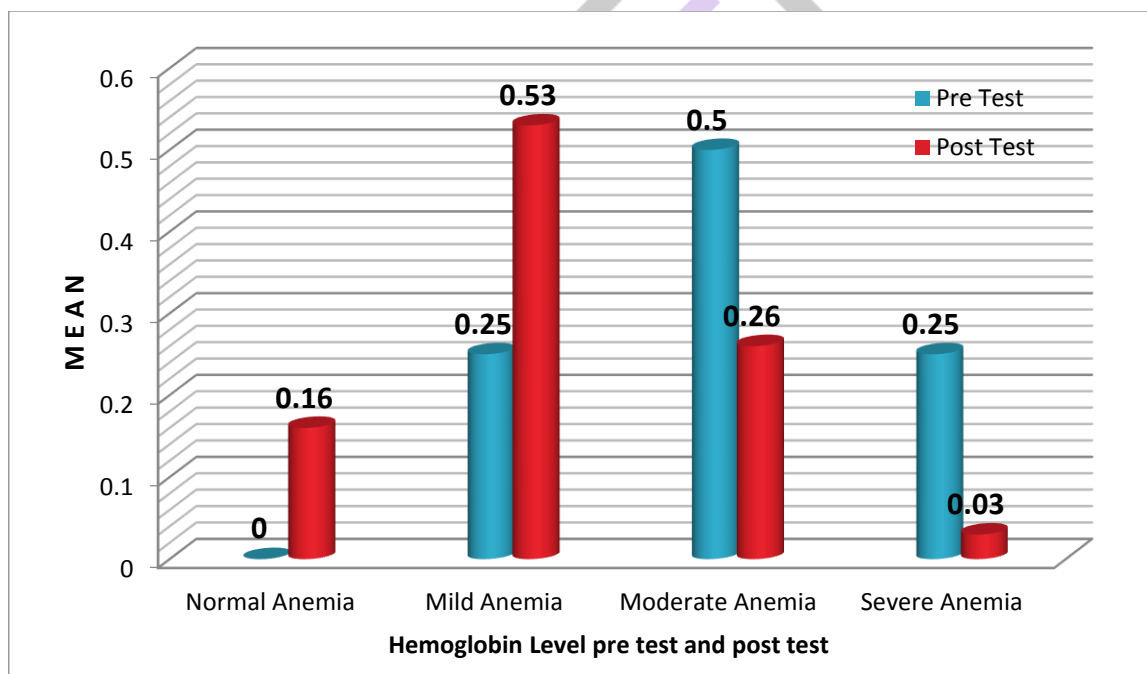
Fig.4: OVERALL POSTTEST OBSERVATION SCORE

#### iv. Analysis and interpretation of pre test and post test Hb Level among the experimental group

**Table.6: Hemoglobin Level pre test and post test.**

Sr. No.	Level of anemia	Pre Test			Post Test			Gain % **
		Obt. score	Mean	Mean%	Obtained score	Mean	Mean%	
1.	Normal (12-14 gm)	-			10	0.16	16.66	16.66
2.	Mild (10-11.8 gm)	15	0.25	25	32	0.53	53.33	28.33
3.	Moderate (7-9.9 gm)	30	0.5	50	16	0.26	26.66	-23.34
4.	Severe (Less than 7 mg)	15	.25	25	2	0.03	3.33	-21.27
	Total	-			-			-

(\*\* = mean post test - mean pre test) The above table 5.26 reveals that pre test and Post test hemoglobin level of the reproductive age women in the selected village.



As regarding to mild Anemia the mean score of pre test was 0.25 where as mean post test score was 0.53. As related to Moderate anemia mean pre test score was 0.5 and mean post test score was 0.26 .as regards to severe anemia mean pre test score was 0.25 and mean post test score was 0.03.

The major finding was no normal hemoglobin level before iron supplements as evidence by 0 per test mean score of Hb where as 0.16 post test Mean scores among the Samples which indicate increase of Hb level after iron supplement therapy.

## DISCUSSION

The data were collected, analyzed and interpreted in terms of objectives of the study .descriptive and inferential statistics were utilized for the data analysis Data were organized and presented in these manner: findings of description of personal data of sample ,knowledge of sample regarding anemia and observation regarding signs of anemia. In connection with the above study was undertaken with the main objective of assessing the knowledge and level of anemia among reproductive age group women. To achieve the set objective 60 samples were studied such was the selection that the maximum numbers of subjects were distributed on different sample characteristics as follows:

Majority of the sample (36.6%) are women of age group 21-25 years of age and majority (78.3%) were married. Majority having education of (63.3%) having primary education and their family income was 1000-3000rupees per month, majority of the sample (78.3%) was house wife. To achieve the first objective of the study the sample were assessed on the knowledge aspects of anemia.

Table 4.4.2 reveals that sample had pretest mean score was 8.86 and post test mean score was 17.75. Pretest mean score attributed to the poor economical condition poor dietary habit and lack of knowledge about anemia.

The second objective of this study was to assess the prevalence of anemia among reproductive age group and that was assessed through Hb test. To achieve the third objective of this study to assess the cases of anemia the survey was done for find out the cases of anemia. To achieve the fourth objective of the study to improve the Hb level the iron tablet therapy was implemented after assessing the knowledge of the samples for 1 Month. To achieve the statement and improve the knowledge among samples, health education was imparted. To achieve the sixth objective to evaluate the prognosis in the samples structured observational check list was prepared. Pretest mean score was 10.54 and post test mean score was 17.71. pretest mean score attributed to the observable signs and complains present for anemia due to poor dietary habit and significant By law Hb level.

## CONCLUSIONS

Community health nursing is one of the extended care practices of nurses where they can reach significant portion of the population during their every developmental stages. Several adult disorders can be prevented if healthy practices are inculcated from the Adolescence. Adolescence is crucial stage of human life where most of the health risk behavior is seeded into the life like Anemia, maintaining figure, smoking, alcoholism, eating junk foods and physical inactivity. Nurses are required to assess the existing knowledge, attitude and practice towards these risky behaviors and should initiate measures to alleviate them.

## BIBLIOGRAPHY

### Books:

1. Burns, R. B. Introduction to Research Method. 45 edition, SAGE Publication. London: 2000.
2. Basavanthappa B.T. Nursing Research, Jaypee Brothers; India: 2003
3. Park.K. ;Preventive and social medicine; 1 8th edition;2002;Published by J.B. Bahnot company; Jabalpur ;Pp 431 to 432
4. Polit Denis. F. and Bernadette, P. Essential of Nursing Research. J.B. Lippincott Co. Philadelphia: 2001
5. Quadil A.F. Drug Calculation: Self Instructional Manual. 4th edition, Ruwi Publication, Oman: 2000.

### Journals:

1. Dutta A.V.;Nagaraj P.K.;Dutta V.P.;case control study of anemia in pregnancy; Indian journal of Preventive and social medicine Vol.23(1);Jan - march2002.
2. Pawar smriti;anemia -major Health problem-The Nursing journal of India;sept 2004 vol IV
3. Ratni Bhan;Need for Early treatment and management of anemia; The nursing jornal of India,Oct 2006.vol.LXXV no 10
4. .Sharma kamlesh kumara; Dr Arun Agarwal, DR Mrs. Jogindravati; Nursing Management of anemia among yong Women; The Nursing Journal of India;Vol.LXXXXXZ No.10 oct 2000;Pp -239 to 240
5. Williams and wilkims;Nursing research,Official journal of Eastern ,Nursing research society and the western institution of Nursing .Jan feb 2006,Lippincott Vol.55

### Websites:

1. <http://en.wikipedia.org/wiki/Anemia>
2. [http://en.wikipedia.org/wiki/medication\\_error](http://en.wikipedia.org/wiki/medication_error)
3. [http://en.wikipedia.org/wiki/Anemia\\_complications](http://en.wikipedia.org/wiki/Anemia_complications)
4. <http://scholar.google.com>
5. [DHCousins@ntlworld.com](mailto:DHCousins@ntlworld.com)
6. [ecarr@bournemouth.ac.uk](mailto:ecarr@bournemouth.ac.uk)
7. [fern.fitzhenry@vanderbilt.edu](mailto:fern.fitzhenry@vanderbilt.edu)