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A STUDY TO ASSESS THE KNOWLEDGE REGARDING WARNING SIGNS OF ANAEMIA AMONG ADULTS AT SELECTED RURAL AREA, PUDUCHERRY

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ABSTRACT:

Introduction: Anemia is a condition characterized by a reduction in the red blood cell count or in the concentration of haemoglobin. Anemia is not a disease; it is a manifestation of various diseases and pathologic conditions. Objectives of the study: The main objective of the study to assess the level of knowledge regarding warning signs of anemia among adults. Methodology: The research approach used for this study was quantitative research approach. descriptive Research Design was adopted for this present study. By using convenient sampling technique, 50 adult were selected for the present study. Results: The present study reveals that Out of 50 samples, 11(22%) of them have inadequate knowledge, 34(68%) of them have moderate knowledge.

Keywords: Anemia, haemoglobin, warning signs

INTRODUCTION

Anemia is a condition characterized by a reduction in the red blood cell count or in the concentration of haemoglobin. Anemia is not a disease; it is a manifestation of various diseases and pathologic conditions. Blood consists of cellular elements and plasma. The cellular elements include erythrocytes, or red blood cells; leucocytes, or white blood cells; and platelets. Red blood cells are the most numerous cells in the blood; approximately 20 billion of them circulate in the blood of an adult. They are required to transport

oxygen to the tissues and organs of the body. Red blood cells contain haemoglobin, an iron-containing protein that acts in the transportation of oxygen to the tissues and carbon dioxide from the tissues. When the concentrations of haemoglobin or red blood cells in the blood are reduced to below normal, anemia is developed.

Anaemia is defined as a decreased concentration of blood haemoglobin. It is a condition in which the number of red blood cells or their oxygen-carrying capacity is insufficient to meet the body's physiological requirements, which vary by age, sex, altitude, smoking habits, and during pregnancy. Its prevalence is inordinately higher among developing nations, because of low socioeconomic status and indigent access to healthcare services

Anemia is a problem of not having enough healthy red blood cells or hemoglobin to carry oxygen to the body's tissues. Hemoglobin is a protein found in red cells that carries oxygen from the lungs to all other organs in the body. Having anemia can cause tiredness, weakness and shortness of breath. There are many forms of anemia. Each has its own cause. Anemia can be short term or long term. It can range from mild to severe. Anemia can be a warning sign of serious illness. Treatments for anemia might involve taking supplements or having medical procedures. Eating a healthy diet might prevent some forms of anemia.

Anemia symptoms depend on the cause and how bad the anemia. Anemia can be so mild that it causes no symptoms at first. But symptoms usually then occur and get worse as the anemia gets worse. If another disease causes the anemia, the disease can mask the anemia symptoms. Then a test for another condition might find the anemia. Certain types of anemia have

symptoms that point to the cause. Possible symptoms of anemia include: Tiredness, Weakness, Shortness of breath, Pale or yellowish skin, which might be more obvious on white skin than on Black or brown skin.Irregular heartbeat, Dizziness or light headedness, Chest pain, Cold hands and feet, Headaches.

Anemia occurs when the blood doesn't have enough hemoglobin or red blood cells.This can happen if:The body doesn't make enough hemoglobin or red blood cells.Bleeding causes loss of red blood cells and hemoglobin faster than they can be replaced. The body destroys red blood cells and the hemoglobin that's in them.

Different types of anemia have different causes. They include:Iron deficiency anemia. Too little iron in the body causes this most common type of anemia. Bone marrow needs iron to make hemoglobin. Without enough iron, the body can't make enough hemoglobin for red blood cells. Pregnant people can get this type of anemia if they don't take iron supplements. Blood loss also can cause it. Blood loss might be from heavy menstrual bleeding, an ulcer, cancer or regular use of some pain relievers, especially aspirin.

Vitamin deficiency anemia. Besides iron, the body needs folate and vitamin B-12 to make enough healthy red blood cells. A diet that doesn't have enough of these and other key nutrients can result in the body not making enough red blood cells.Also, some people can't absorb vitamin B-12. This can lead to vitamin deficiency anemia, also called pernicious anemia.Anemia of inflammation. Diseases that cause ongoing inflammation can keep the body from making enough red blood cells. Examples are cancer, HIV/AIDS, rheumatoid arthritis, kidney disease and Crohn's disease.

Aplastic anemia. This rare, life-threatening anemia occurs when the body doesn't make enough new blood cells. Causes of aplastic anemia include infections, certain medicines, autoimmune diseases and being in contact with toxic chemicals.Anemias linked to bone marrow disease. Diseases such as leukemia and myelofibrosis can affect how the bone marrow makes blood. The effects of these types of diseases range from mild to life- threatening.Hemolytic anemias. This group of anemias is from red blood cells being destroyed faster than bone marrow can replace them. Certain blood diseases increase how fast red blood cells are destroyed. Some types of hemolytic anemia can be passed through families, which is called inherited.

Pregnant people who don't take a multivitamin with folic acid and iron are at an increased risk of anemia. Ongoing, called chronic, conditions. Having cancer, kidney failure, diabetes or another chronic condition increases the risk of anemia of chronic disease. These conditions can lead to having too few red blood cells. Slow, chronic blood loss from an ulcer or other source within the body can use up the body's store of iron, leading to iron deficiency anemia. Family history. Having a family member with a type of anemia passed through families, called inherited, can increase the risk of inherited anemias, such as sickle cell anemia. Other factors. A history of certain infections, blood diseases and autoimmune conditions increases the risk of anemia. Drinking too much alcohol, being around toxic chemicals, and taking some medicines can affect the making of red blood cells and lead to anemia. Age. People over age 65 are at increased risk of anemia.

The complication is if not treated, anemia can cause many health problems, such as:Severe tiredness. Severe anemia can make it impossible to do everyday tasks.Pregnancy complications. Pregnant people with folate deficiency anemia may be more likely to have complications, such as premature birth.Heart problems. Anemia can lead to a rapid or irregular heartbeat, called arrhythmia. With anemia, the heart must pump more blood to make up for too little oxygen in the blood. This can lead to an enlarged heart or heart failure. Death. Some inherited anemias, such as sickle cell anemia, can lead to life-threatening complications. Losing a lot of blood quickly causes severe anemia and can be fatal.

The prevention are many types of anemia can't be prevented. But eating a healthy diet might prevent iron deficiency anemia and vitamin deficiency anemias. A healthy diet includes:Iron. Iron-rich foods include beef and other meats, beans, lentils, iron-fortified

cereals, dark green leafy vegetables, and dried fruit.Folate. This nutrient, and its human-made form folic acid, can be found in fruits and fruit juices, dark green leafy vegetables, green peas, kidney beans, peanuts, and enriched grain products, such as bread, cereal, pasta and rice. Vitamin B-12. Foods rich in vitamin B-12 include meat, dairy products, and fortified cereals and soy products.Vitamin C. Foods rich in vitamin C include citrus fruits and juices, peppers, broccoli, tomatoes, melons, and strawberries. These also help the body take in iron.If you're concerned about getting enough vitamins and minerals from food, ask your health care provider about taking a multivitamin.

The diagnose anemia, your health care provider is likely to ask you about your medical and family history, do a physical exam, and order blood tests. Tests might include:Complete blood count (CBC). A CBC is used to count the number of blood cells in a sample of blood. For anemia, the test measures the amount of the red blood cells in the blood, called hematocrit, and the level of hemoglobin in the blood.Typical

adult hemoglobin values are generally 14 to 18 grams per deciliter for men and 12 to 16 grams per deciliter for women. Typical adult hematocrit values vary among medical practices. But they're generally between 40% and 52% for men and 35% and 47% for women.A test to show the size and shape of the red blood cells. This looks at the size, shape and color of the red blood cells.If you get a diagnosis of anemia, you might need more tests to find the cause. Sometimes, it can be necessary to study a sample of bone marrow to diagnose anemia.

Anemia treatment depends on the cause.Iron deficiency anemia. Treatment for this form of anemia usually involves taking iron supplements and changing the diet.If the cause of iron deficiency is loss of blood, finding the source of the bleeding and stopping it is needed. This might involve surgery.Vitamin deficiency anemias. Treatment for folic acid and vitamin B-12 deficiency involves dietary supplements and increasing these nutrients in the diet.

People who have trouble absorbing vitamin B-12 from food might need vitamin B-12 shots. At first, the shots are every other day. In time, the shots will be shots just once a month, possibly for life.Anemia of chronic disease. Treatment for this type of anemia focuses on the disease that's causing it. If symptoms become severe, treatment might include getting blood, called a transfusion, or shots of a hormone called erythropoietin.

Anemias associated with bone marrow disease. Treatment of these various diseases can include medicines, chemotherapy or getting bone marrow from a donor, called a transplant.Aplastic anemia. Treatment for this anemia can include blood transfusions to boost

levels of red blood cells. A bone marrow transplant might be needed if bone marrow can't make healthy blood cells.Hemolytic anemias. Managing hemolytic anemias includes stopping medicines that might be causing it and treating infections. If the immune system is attacking red blood cells, treatment might involve taking medicines that lower immune system activity.Sickle cell anemia. Treatment might include oxygen, pain relievers, and hydration with fluids given through a vein, called intravenous, to reduce pain and prevent complications. Receiving blood, called a transfusion, and taking folic acid supplements and antibiotics might be involved.A cancer drug called hydroxyurea (Droxia, Hydrea, Siklos) also is used to treat sickle cell anemia. Thalassemia. Most forms of thalassemia are mild and need no treatment. More-severe forms of thalassemia generally require blood transfusions, folic acid supplements, medicines, a blood and bone marrow stem cell transplant, or, rarely, removing the spleen.

Anemia can lead to severe tiredness, making it very hard to get through your day. It can also lead to an arrhythmia, or irregular heartbeat. Because there isn't as much oxygen in the blood, the heart must pump more, which could lead to heart failure. Anemia can even be fatal, especially if you lose a lot of blood too quickly.

NEED FOR THE STUDY

WORLD LEVEL

Globally, it is estimated that 40% of all children aged 6–59 months, 37% of pregnant women and 30% of women 15–49 years of age are affected by anaemia. Anaemia caused 50 million years of healthy life lost due to disability in 2019.

INDIA LEVEL

Anemia is a major public health concern in India with 58.6% of children, 53.2% of non- pregnant women, and 50.4% of pregnant women being affected by the condition. In India more than 15 states belong to the high prevalence (>%55) of anemia among socially backward groups in 2019–21. Poverty, caste issues, and poor sanitation are the principal reason for anemia in India.

STATE LEVEL

As per the NFHS-4, Haryana had the greatest percentage of students suffering from anemia (71%), Jharkhand at 69.9%, Madhya Pradesh at 68.9%, Bihar at 63.5%, and Uttar Pradesh at 63.5% are the top three states. And in Union territory of Dadra and Nagar Haveli, 84.6% of children were anemic, 73.8% in the union territory of Daman and Diu, and 73.1% in the state of Chandigarh.

TAMILNADU

The National Family Health Survey-5 (2019-21) shows that in Tamilnadu, 53. 4% of women in the 15-49 a ge group are anaemic, and the figure for rural w omen is four percentage points higher than their urban counterparts.

STATEMENT OF THE PROBLEM

A study to assess the knowledge regarding warning signs of anaemia among adults at selected rural area Puducherry.

OBJECTIVES OF THE STUDY:

- To assess the level of knowledge regarding warning signs of anemia among adults
- To associate the level of knowledge regarding warning signs of anemia among adults with their selected demographic variables.

RESEARCH METHODOLOGY:

Research approach is the basic procedure for conducting the study. A quantitative research approach was adapted for this study.

RESEARCH APPROACH:

A quantitative research approach was adapted for this study.

RESEARCH DESIGN:

A descriptive Research Design was adopted for this study.

POPULATION:

The target population for this study assess of among adults at selected rural area Puducherry.

SETTING OF THE STUDY:

The study was conducted at, Kalitheerthalkuppam at Puducherry.

SAMPLE

The sample for the study to assess the warning signs of anaemia among adults at Kalitheerthalkuppam at Puducherry

SAMPLE SIZE:

The sample size consists of 50 adults.

SAMPLING TECHNIQUE:

Convenient sampling technique was used for the present study.

CRITERIA FOR SAMPLE SELECTION:

Inclusion criteria:

- Community people belongs to adult population.
- People who are willing to participate in the study.
- Both gender are participate in the study.

Exclusion criteria:

- Sick / ill / absent during the time of data collection
- Study variable

MAJOR FINDING

The study result shows that out of 50 adults who were interviewed, Majority of the People 32(64%) were in the age group above 20-30 years. Most of the People 38(76%) were females. Most of the people 44(88%) belongs to Hindu religion. Most of them, 41 (82%) are graduate. Majority of them are unemployed 25 (50%). Most of the patient had lifestyle disease 42(84%). Majority of them unmarried 42(84%) and belongs to nuclear family
29(58%).

RESULTS AND DISCUSSION

Table 1: Frequency and percentage wise distribution of knowledge regarding warning signs of anaemia among adults [N= 50]

SCORING INTERPRETATION	FREQUENCY	PERCENTAGE
Inadequate knowledge	11	22%
Moderate knowledge	34	68%
Adequate knowledge	5	10%

Figure 1: Frequency and percentage wise distribution of knowledge regarding warning signs of anaemia among adults

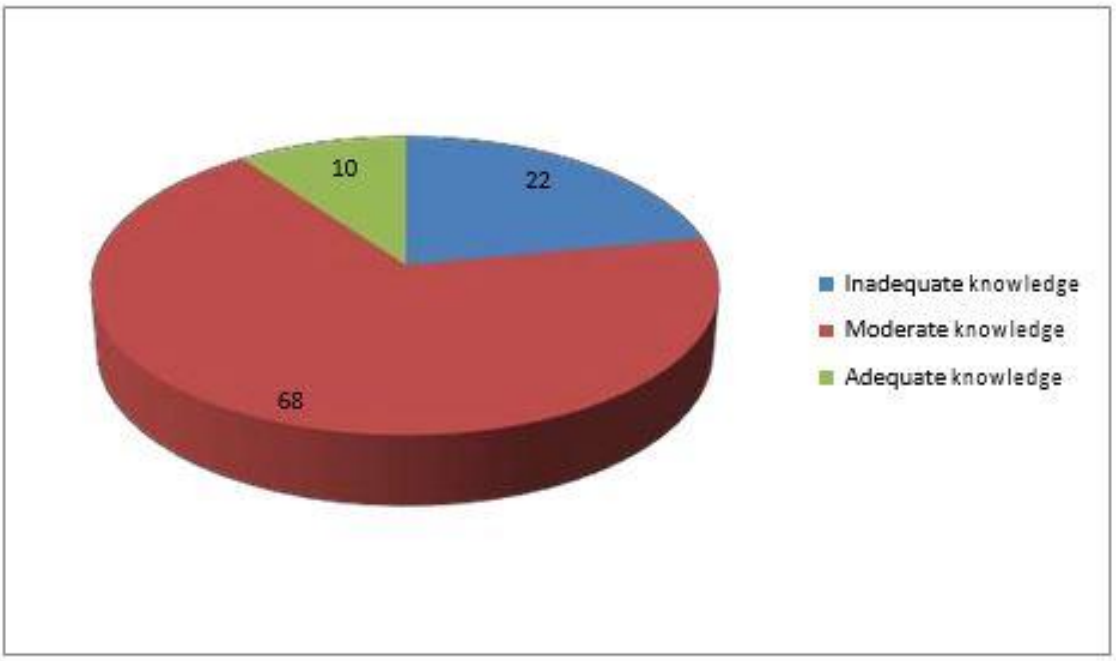

Figure 2: Mean and Standard deviation of knowledge on regarding warning signs of anaemia among adults at selected rural area Puducherry [N = 50]

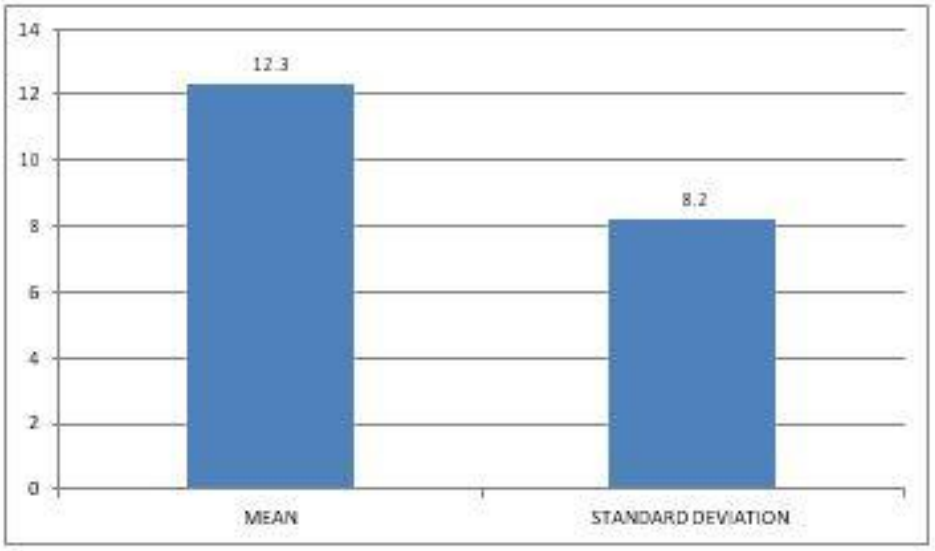

Table 3: Association on assess the knowledge regarding warning signs of anaemia among adults at selected rural area Puducherry [N = 50]

S.N O	DEMOGRAPHIC DATA	Inadequate knowledge		Moderate knowledge		Adequate knowledge		X^2
		N	%	N	%	N	%	
1	Age							
	a. 20-30years	3	6	24	48	5	10	X^2=**9.893****
	b. 30_40 years	8	16	10	20		0	Df=2
	c. 40_50 years	0	0	0	0	0	0	P=.0071
	d. Above 60 years	0	0	0	0	0	0	
2	Gender							X^2=**4.572**
	a. male	5	10	7	14		0	Df=2
	b. Female	6	12	27	54	5	10	P=.1017
3	Religion							
	a) Hindu	9	18	30	60	5	10	
	b) Muslim	2	4	4	8	0	0	X^2=**1.082**
	c) Christian	0	0	0	0	0	0	Df=2
	d) Others	0	0	0	0	0	0	P=.5823
4	Educational status							
	a. Illiterate	3	6	3	6	0	0	
	b. Primary school	0	0	0	0	0	0	X^2=**7.945**
	c. Secondary school	2	4	1	2	0	0	Df=4
	d. Graduate	6	12	30	60	5	10	P=.0936
5	Job type							
	a. Government	1	2	1	2	0	0	X^2=**3.562**
	b. Private	2	4	9	18	1	2	Df=6
	c. Own business	3	6	8	16		0	P=.7356

	d. Unemployed	5	10	16	32	4	8	
6	Socioeconomic status							
	a. Low class socioeconomic status	5	10	10	20	0	0	
	b. Middle class socioeconomic status	5	10	24	48	5	10	X^2=**7.534**
	c. High class socioeconomic status	1	2	0	0	0	0	Df=4
7	Marital status							
	a. Unmarried	5	10	32	64	5	10	X^2=**15.702***
	b. Married	6	12	2	4	0	0	Df=2
	c. Divorced	0	0	0	0	0	0	P=0.0004
8	Types of family							
	a. Nuclear	4	8	20	40	5	10	X^2=**5.744**
	b. Joined family	7	14	14	28	0	0	Df=2
	c. Single	0	0	0	0	0	0	P=.0566
9	Type of residence							X^2=**4.800**
	a. Rural	7	14	30	60	5	10	Df=2
	b. Urban	4	8	4	8	0	0	P=.0907
10	Any lifestyle diseases							X^2=**5.652**
	a. Yes	7	14	16	32	0	0	Df=2
	b. No	4	8	18	36	5	10	P=0.0592

-p<0.05, significant and **-p<0.001, highly significant

Table IV: Shows that Association on assess the knowledge regarding warning signs of anaemia among adults at selected rural area puducherry with their selected demographic variables. The chi square reveals that it is statistically association with age and marital status with p<0..001 significant level and others are non-signification.

CONCLUSION:

This chapter respond a brief summary of the study, conclusion and implication for further recommendation. The present study to assess the knowledge regarding warning signs of anaemia among adults at selected rural area Puducherry. The quantitative research approach is selected for the present study selected. A total of 50 adult who met the inclusion criteria were selected from rural area Puducherry by using descriptive Research Design. The researcher first introduced herself to the staff nurses and developed a rapport communication with them. After the selection of samples the data was collected with the prepared tools

RECOMMENDATIONS:

Based on findings of the present study, the following recommendation have been made

- The same study can be conducted in at selected rural area Puducherry
- The study can be replicated with larger samples for better generalization.
- The study can be implemented at the various states of India

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