

Examining prevalence and risk factors for anemia in referred gynecological diseases to Ali Ibn Abi Talib Hospital of Zahedan city

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ABSTRACT

Anemia is a common blood disorder that is one of the Hygiene & Health problems of today, In which there is not enough red blood cells or hemoglobin in the blood. Research shows, amount of anemia in women is more than men; Especially about young girls are entering puberty and begin of menstruation. Iron deficiency in diet is other underlying factors that cause anemia, Blood loss caused by Continuous bleeding at the time of menstruation, digestive disorders, vaginal infections, cancer and pregnancy are some of the factors that in gynecological diseases can also cause anemia ,However, in addition to iron ,absence of some required nutrients and vitamins for the body can also cause anemia. Information and to identify risk factors by the patient, Nowadays can help healthcare system in the diagnosis and treatment, In addition, the doctor can recognize treatment according to patient involvement with any of the underlying disease and apply for treatment with detailed knowledge of risk factors , In this article, have tried also careful study risk factors for anemia in patients referring to gynecology clinic Ali ibn Abi Talib Hospital in Zahedan, Statistical population is provided for patient involvement with each risk factor. We hope to be able to do this research, take effective step to improve the public health.

KEY WORDS: PREVALENCE, RISK FACTORS, ANEMIA, GYNECOLOGICAL DISEASES, ZAHEDAN

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INTRODUCTION

Anemia is a common blood disorder that is one of the hygiene and health problems of today, in which there is not enough red blood cells or hemoglobin in the blood. Hemoglobin in red blood cells causes, oxygen to bind with red blood cells to reach to various tissues of body by capillaries. Because all human cells depend on oxygen to survive, its deficiency leads to hypoxia and results in wide range of problems. Physiologically anemia can be caused by iron deficiency, folic acid, and vitamin B12. Research shows, amount of anemia in women is more than men; especially about young girls are entering puberty and begin of menstruation. More pregnant women due to physiological changes in the body that is created during pregnancy and childbirth, strike to anemia, (Baig-Ansari & Badruddin, 2004).

Blood loss caused by continuous bleeding at the time of menstruation, digestive disorders, vaginal infections and or cancer can also cause anemia. Iron deficiency in diet is other underlying factors that is caused anemia, if the food, which is used daily, have small amount of iron or in the diet remove meat, occurs Iron deficiency. Pregnant women, especially those who are breastfeeding due to functional systems of body need iron several times more than typical person and their diet should be rich in iron. Frequent consumption of drugs that destroy vitamin D in the body use of drugs and supplements that prevent to absorption of iron, Catching chronic diseases associated with bleeding such as: Tuberculosis, catching the fruit worms and parasites, and lack of digestive enzymes, especially stomach acid, are factors that prevent iron absorption. Pregnant women during pregnancy should regularly visit to their doctor and it is better examined in terms of catching anemia before pregnancy, and if they need to use medicines and supplements, after improvement, action to be pregnant.

Due to the increased iron requirements during pregnancy. In addition to increasing amount of this material in their diets, From the fourth month of pregnancy until three months after giving birth, should use iron supplements (Guralnik *et al.*, 2004) for the detection of anemia, blood test is the best way, type and severity of anemia is determined by testing and doctor can diagnose that is this deficiency can be remedied with diet or is there need of medication. If is need to medication, doctor prescribes course of required medication and again test is taken from individual and if necessary, medicine consumption would be extended for the new period. Noting this point is essential that never should not be arbitrarily used tablets and iron supplements. more common Segmentation of anemia (decreased hemoglobin) is based on MCV or the volume of red blood cells, So that MCV less than 80 as microcytic anemia, MCV within the normal range

(100-80), Normocytic anemia (normal cell volume) and high MCV, are called macrocytic anemia (Lindenfeld, 2005).

The most important signs and symptoms of anemia include: Fatigue and feel exhausted, lethargy, hair loss, restlessness and discomfort, Shortness of breath or difficulty in breathing, poor concentration, palpitations, sensitivity to cold air, Chest pain, tinnitus, headaches, affect the sense of taste, Dry tongue, difficulty in swallowing, restless leg syndrome, Dry and scaly or spoon-shaped nails, First of all, should identify presence or absence of anemia and also its type and then if necessary use of supplements under medical doctor (Shirvani & Nikfar, 2001). Anemia is recognized in terms of laboratory that hemoglobin or hematocrit of person concerned is less than the desired, its probability and severity is diagnosed based on amount of patient's hemoglobin and hematocrit deviation from the estimated value of age and sex. The amount of average hematocrit for adult men 47% ($7 \pm sd$) and for adult women 45% ($5 \pm sd$) as well as the World Health Organization (WHO) defines anemia ,Hemoglobin less than 130 grams per liter (13 grams per deciliter) for men and 120 grams per liter (12 grams per deciliter) for women. Iron deficiency anemia is the most common type of anemia in women. Research has shown that women's problems has significant relationship with anemia, iron deficiency and the underlying disease (Shirvani & Nikfar, 2001).

It is possible the person who has iron deficiency and subsequently anemia to reduce or getting reducing or cut bleeding during menstruation ,conflict depends on the body's iron reserves which usually goes away with prescription pills, but if not natural and does not respond to treatment, should be closely examined the cause. Because it may disturb hormonal cycle which if disrupted can cause gastrointestinal disorders. On the contrary, this issue can also occur, Excessive menstrual bleeding causes strike to anemic and muscle cramps occurs in yourselves and cannot do your daily activities, If menstrual bleeding is excessive high, it is called menorrhagia. Excessive bleeding, irregular bleeding, any bleeding after menopause can be reasons for establishing anemia. Intestinal disorders and Indigestion of food can also be underlying factors of anemia, No absorption of nutrients and vital elements are the Chronic or acute problems that involves patients with intestinal disorders and digestive disorders and can also be causes of types of anemia. Celiac disease is chronic disease of the small intestine, As well indigestion problems cause utilization of nutrients and vital elements for the human body (Safavi, 2006). There are many underlying causes of anemia and risk factors for it are widespread .in the present study with prepared questionnaire and consider referred women to Ali ibn Abi Talib hospital in city of

Zahedan in first six months of 2015, has been paid to examining prevalence and causes types of anemia in the target population.

METHODS

For a total 350 patients referred to the Ali ibn Abi Talib hospital in city of Zahedan in terms of personal information (Age, weight, height, marital status, education, occupation, income, hometown) Behavior and relationships of sexual (Age at marriage, age at menarche, age at first sexual intercourse, age at first pregnancy, investigate menstrual abnormality, risky sexual behavior and having multiple sexual partners), Blood pressure, use of dietary supplements, dietary information, Underlying disease, type of consumable drugs and catching to types of anemia were evaluated and analyzed in this study, received Information from the questionnaires were analyzed by using spss software. Researchers in the current study have used library resources and international authoritative articles for clinical reasoning of above article.

FINDINGS

In this study of the total 350 patients admitted to hospital, 279 patients (79.71%) have faced with types of anemia, symptoms of anemia and iron deficiency or had suffered to the underlying disease, anemia and poor diet. These statistics provide a place of reflection in order to further investigation for researchers. Iron deficiency anemia has been a public health problem that Developing and developed countries are caught in that. According to the definition provided by the World Health Organization in 2014, Iron deficiency anemia is called to reduce the concentration of blood hemoglobin that is less than the normal range that this amount depending on the age, sex and physiological conditions (such as pregnancy) is different. Investigations in above study indicate of the total statistical population, 241 case (68.85%) of clients have been involved with iron deficiency anemia that show the importance of this subject.

IRON DEFICIENCY ANEMIA

Iron deficiency anemia is the most common cause of anemia in the world; But because of it, significant number of patients remain unknown. Iron deficiency anemia (IDA) is to reduce red blood cells or insufficient hemoglobin in red blood cells, This anemia is created due to other diseases. So, for proper treatment of anemia, the cause must be found (Davari, 2005). In the present research, have paid to statistical analysis of relationship between gastrointestinal irritation, menstrual disorders,

reproductive tract infections, nutrition and blood pressure with Iron deficiency anemia. According to the latest medical research, from every fifth Iranian woman, one person is suffering from anemia and factors listed is related to one of these silent disease (Shirvani & Nikfar, 2001). The body requires raw materials such as iron and vitamins especially folic acid, for hematopoiesis. But most people around the world have little access to food sources of iron (vitamin B12 such as meat) (Shirvani & Nikfar, 2001). So anemia, resulted from Iron deficiency is considered the most common and the most important anemia of people in the world. The main part of hematopoiesis of body occurs through bone marrow. Because of this, factors that cause to damage bone marrow, can be caused anemia.

Research shows that two-thirds of Iranians nutritional problems is caused by shortages and reception problem of iron. Anemia in children start from period after 6 months and have negative impact on IQ of people. Ability to learn and concentration of girls especially in adolescence are overwhelmed by the complications of anemia. disregard health issues often arise due to culture and economic poverty, and lack of human health, with there poor eating habits gives hand in hand to people caught this dangerous disease. From the perspective of traditional medicine, consumption of a cup of tea after meals reduces iron absorption more than 95% and consumption of an orange or two tangerines shortly after eating will increase the iron absorption of foodstuffs. Unfortunately, in Iran we are seeing mistaken belief after meals. Anemia, is not only iron deficiency but many factors are effective involved in this disease that may be unaware of their existence that is included such as intestinal disorders, pregnancy, hemorrhage and.... The rest of this article becoming familiar with findings of scientific research and conclusions.

Prevalence: The prevalence suggests of the total statistical population 241 case (68.85%) of patients have involved with Iron deficiency anemia that had exposed to Iron deficiency anemia.

Table 1 shows the risk of anemia. The impact on initial indicators in risk factors, and underlying disease of target population in two danger zone (red) and warning (orange) and the other (black).

Diet lacking in required vitamins and vital elements for hematopoiesis is one of very important underlying causes of Iron deficiency anemia, Diets which is available small amount iron, vitamin b 12, folic acid and other vital elements such as zinc, copper, etc. in them, increases the risk of Anemia. In the present research 170 cases (48.57%), have denied use of vital dietary supplements to prevent anemia and 137 cases (39.14%), have not informed from sufficient public information about the proper diet to prevent anemia.

Table 1. Evaluation of Initial indicators of patients and their relationship with risk factors for anemia in women referred to Ali ibn Abi Talib hospital in city of Zahedan					
Chronic Diseases	Pregnancy	Menstruation	Intestinal disorders	Food poverty	Index / Risk Factors
37.4	27.2	23.9	29.5	28.8	Average of age
63.5	62.8	60.2	56.3	53.4	Average of weight
166.3	165.1	158.2	155.9	155.6	Average of Height
24.6	20.8	20.4	23.3	23.9	The average age of first sexual exercise
14.3	14.1	13.1	13.8	13.4	The average age of first menstruation

Intestinal disorders: Intestinal disorders which affects on absorption of nutrients by your body, Can increase risk of catching your to anemia. causes and symptoms of Coronel disease, irritable bowel syndrome, celiac disease, ulcerative colitis and diverticulosis and any gastrointestinal discomfort have been questioned in terms of catching the disease and history of catching and symptoms. A total of 128 cases (36.57%), have confirmed intestinal disorders and gastrointestinal disorders which in conjunction with the intestinal disorder celiac disease with 12 case (3.42%) of reported having involvement are included highest rate of intestinal disorders and It should be noted that all 12 cases of celiac disease (100%) have confirmed anemia, 101 (28.85%) cases have confirmed

digestive disorders such as indigestion, abdominal pain, bloating, diarrhea, rectal bleeding and loss of appetite.

Menstruation: Generally, women in menstrual age become anemic than men and postmenopausal women. 48 case (13.71%) have confirmed menstrual disorders, 9 case (2.57%), irregular cycles, 21 case (6%) major bleeding during menstruation, 8 case (2.28%) other cases and also 12 case (3.42%) have confirmed low bleeding during menstrual. Which can be a sign of anemia. 93 case (26.57%) have confirmed existence of the symptoms of anemia such as paleness, general weakness, dizziness, shortness of breath and lack of focus. However, comparing the symptoms of anemia is not logical due to simi-

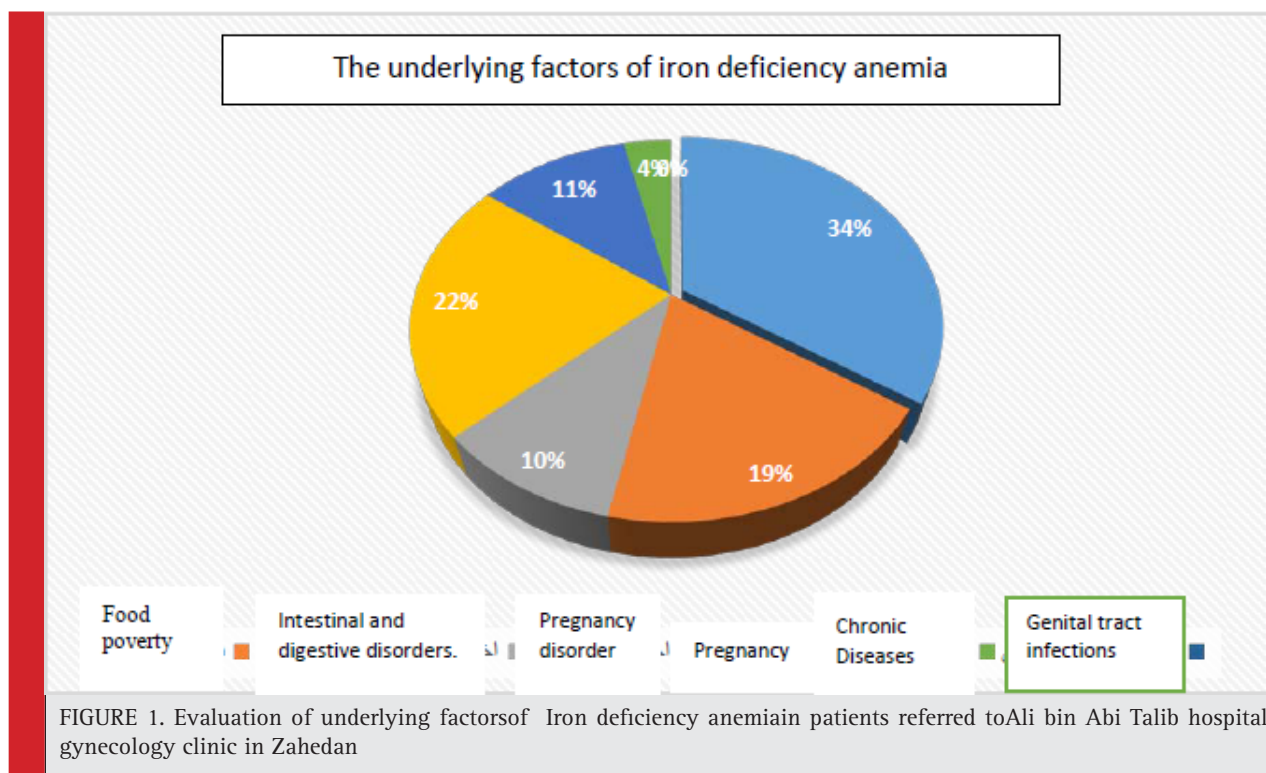


FIGURE 1. Evaluation of underlying factorsof Iron deficiency anemia in patients referred toAli bin Abi Talib hospital gynecology clinic in Zahedan

larity to menstrual symptoms during menstruation but these similarities can also be thought-provoking.

Pregnancy: increased the risk of anemia during pregnancy and 119 case (34%) have confirmed anemia during pregnancy and of those, 74 case (21.14%) have confirmed use of dietary supplements and proper diet to prevent anemia during pregnancy.

Chronic Diseases: Diseases such as cancer, liver or kidney failure or other chronic diseases increase the risk of anemia. 12 case (42.3%) have confirmed anemia during involvement with Chronic Diseases.

Genital tract infections: Although genital tract infections doesn't have direct relationship with anemia and the present study does not have able to prove it but from among the 12 patients with pelvic inflammatory disease 7 case (2%) have confirmed anemia and from 68 patients with genital infection contains Vaginal yeast infections, dermatitis, etc. 13 case (71.3%) have confirmed anemia.

Health Literacy: The ability of individuals to acquire, analyze, and understand basic health information and services that they need to them to be able to take the right decisions about issues related to their health that is called health literacy. in the present study amount of General Information of all clients have been measured by asking questions which have filled the questionnaire which unfortunately 213 case (85.60%) have poor public information in relation to anemia, treatment strategies, prevention and symptoms of anemia and only 29 (28.8%) case enjoy excellent public information in the field of anemia.

CONCLUSION

In terms of physiologic, Anemia can be caused by deficiency of iron, folic acid, also be created lack of vitamin B12. anemia associated with Iron deficiency and vitamin deficiency, can be prevented with one diet high in vitamins, This vitamins are available in organized food and in Nature that Unfortunately, bad eating habits, dependence on poor diet and poverty in Sistan and Baluchestan Province is cases and underlying factors to cause iron deficiency anemia with examine credible sources of nutrition and traditional medicine, we find iron-rich foods such as dark green leafy vegetables, artichokes, apricots, beans, lentils, peas, soybeans, meat, nuts, prune and raisin for having adequate iron stores should be included in the diet. Folate and his family folic acid are available in citrus, banana, dark and leafy vegetables, legumes, and fortified foods. Vitamin B12 is also available naturally in meat and dairy products. Also this vitamin is also available in some soy milk.

Research has shown that foods rich in vitamin C such as citrus will help iron absorption. Unfortunately, the lack of adequate information and having public information has been caused cultural poverty and has become iron deficiency to health threat.

Results of this study show increasing Factors the risk of developing Iron deficiency anemia Include Inappropriate and inadequate feeding, age over 60 years, Recent illness, such as Ulcers or duodenal, diverticulitis, colitis, hemorrhoids, Celiac disease or digestive tract tumors, pregnancy, menstrual disorders and Chronic diseases including cancer, Liver or kidney disease are most important underlying factors that create risk of developing anemia. Anemia covers a wide range of diseases and in above study are also available Symptoms of anemia in patients with fungal infections and bacterial vaginal and sometimes anemia has been confirmed by the patient that can not decisive comment and is required to do practical research but should be named anemia as today's threatening the health of patients and society.

The results of above study with considered study population ,shoud to say immune performance systems of women is weaker compared to men and many diseases are caused bad performance of immune system which include blood diseases Such as aplastic anemia, leukemia, sickle cell anemia, and myelofibrosis and this means intensifying the anemia and involvement of women compared to men, women Considering that are involved to pregnant have likely to more involves Iron deficiency and anemia, and all pregnant women should be use iron tablets at the end of fourth month to three months after delivery and then also measured their iron stores by doing experiments and share with doctor.

Ministry of Health in Iran provide iron pills and gives free to these mothers through health homes and health centers care. In addition in these centers, is performed Learning the importance of iron supplementation, Preventive ways of iron deficiency anemia and nutrition advice and food sources of iron by Staff and nutrition expert. But it seems do not relevant measures in areas in Sistan and Baluchestan Province or demands required to further work by the officials and personnel therapeutic of Province. Menstrual disorders as Women's chronic distress can cause severe anemia in women and require more attention of doctors and health care workers and health of country and demand more detailed and clinical research, amount of anemia in women is more than men; Especially about young girls are entering age of puberty and begin of menstruation.

More pregnant women due to physiological changes in their body that is ceated during pregnancy and child-birth, are suffering from anemia, brings need to Notices

and Sounding the alarm bell for This stratum of society, Celiac disease is faced patients with these problems as a disease of malabsorption of nutrients, the absorption of iron and vitamin B12 .Iron deficiency and anemia in this study have been confirmed in all patients and has required to rigorous scientific research in these patients in the province. At the end declare gratitude and thanks from all Ali bin Abi Talib hospital personnel in city of Zahedan in order to accompany the researchers of above study.

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