PREVALENCE OF ANEMIA AMONG PREGNANT FEMALES

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ABSTRACT:
Anemia (also spelled anaemia) is a decrease in the total amount of red blood cells (RBCs) or hemoglobin in the blood, or a lowered ability of the blood to carry oxygen. When anemia comes on slowly, the symptoms are often vague and may include feeling tired, weakness, shortness of breath, and a poor ability to exercise. A total of 130 patients were included in this cross-sectional study. Brief demographic data of these patients was collected after taking the informed consent. The maternal age and gestational age was noted. Hb value of all the patients was noted. All the data was entered and analyzed using SPSS Ver. 23.0. The mean maternal age of the patients was 31.23±2.34 years. The minimum age of patients was 25 years, and the maximum age was 34 years. Out of these 130 patients, 70 patients were anemic and 43 patients of them were taking iron supplements.

KEYWORDS: ANEMIA

INTRODUCTION:
Anemia (also spelled anaemia) is a decrease in the total amount of red blood cells (RBCs) or hemoglobin in the blood, or a lowered ability of the blood to carry oxygen. When anemia comes on slowly, the symptoms are often vague and may include feeling tired, weakness, shortness of breath, and a poor ability to exercise. When the anemia comes on quickly, symptoms may include confusion, feeling like one is going to pass out, loss of consciousness, and increased thirst. Anemia must be significant before a person becomes noticeably pale. Additional symptoms may occur depending on the underlying cause.

Anemia can be caused by blood loss, decreased red blood cell production, and increased red blood cell breakdown. Causes of blood loss include trauma and gastrointestinal bleeding. Causes of decreased production include iron deficiency, vitamin B12 deficiency, thalassemia, and a number of neoplasms of the bone marrow. Causes of increased breakdown include genetic conditions such as sickle cell anemia, infections such as malaria, and certain autoimmune diseases. Anemia can also be classified based on the size of the red blood cells and amount of hemoglobin in each cell. If the cells are small, it is called microcytic anemia; if they are large, it is called macrocytic anemia; and if they are normal sized, it is called normocytic anemia. The diagnosis of anemia in men is based on a hemoglobin of less than 130 to 140 g/L (13 to 14 g/dL); in women, it is less than 120 to 130 g/L (12 to 13 g/dL). Further testing is then required to determine the cause.

Certain groups of individuals, such as pregnant women, benefit from the use of iron pills for prevention. Dietary supplementation, without determining the specific cause, is not recommended. The use of blood transfusions is typically based on a person’s signs and symptoms. In those without symptoms, they are not recommended unless
hemoglobin levels are less than 60 to 80 g/L (6 to 8 g/dL). These recommendations may also apply to some people with acute bleeding. Erythropoiesis-stimulating medications are only recommended in those with severe anemia.

Anemia is the most common blood disorder, affecting about a third of the global population. Iron-deficiency anemia affects nearly 1 billion people. In 2013, anemia due to iron deficiency resulted in about 183,000 deaths – down from 213,000 deaths in 1990. It is more common in women than men, during pregnancy, and in children and the elderly. Anemia increases costs of medical care and lowers a person's productivity through a decreased ability to work. The name is derived from Ancient Greek: ἀναιμία anaimia, meaning "lack of blood", from ἄν- an-, "not" and αἷμα haima, "blood". Anemia is one of the six WHO global nutrition targets for 2025 and diet-related global NCD targets for 2025, endorsed by World Health Assembly in 2012 and 2013. Efforts to reach global targets contributes reaching Sustainable Development Goals (SDGs), and Anemia being one of the targets in SDG 2 (1-3).

Material of Methods:
A total of 130 patients were included in this cross-sectional study. Brief demographic data of these patients was collected after taking the informed consent. The maternal age and gestational age was noted. Hb value of all the patients was noted. All the data was entered and analyzed using SPSS Ver. 23.0. The qualitative variables were presented as numbers and frequencies. The quantitative variables were presented as mean and standard deviation.

RESULTS:
The mean maternal age of the patients was 31.23±2.34 years. The minimum age of patients was 25 years, and the maximum age was 34 years. Out of these 130 patients, 70 patients were anemic and 43 patients
of them were taking iron supplements.

DISCUSSION:
Nutritional iron deficiency is common in developing nations. An estimated two-thirds of children and of women of childbearing age in most developing nations are estimated to have iron deficiency without anemia; one-third of them have iron deficiency with anemia. Iron deficiency due to inadequate dietary iron intake is rare in men and postmenopausal women. The diagnosis of iron deficiency mandates a search for potential sources of blood loss, such as gastrointestinal bleeding from ulcers or colon cancer. Mild to moderate iron-deficiency anemia is treated by oral iron supplementation with ferrous sulfate, ferrous fumarate, or ferrous gluconate. Daily iron supplements have been shown to be effective in reducing anemia in women of childbearing age. When taking iron supplements, stomach upset or darkening of the feces are commonly experienced. The stomach upset can be alleviated by taking the iron with food; however, this decreases the amount of iron absorbed. Vitamin C aids in the body’s ability to absorb iron, so taking oral iron supplements with orange juice is of benefit.

In cases where oral iron has either proven ineffective, would be too slow (for example, pre-operatively) or where absorption is impeded (for example in cases of inflammation), parenteral iron can be used. The body can absorb up to 6 mg iron daily from the gastrointestinal tract. In many cases the patient has a deficit of over 1,000 mg of iron which would require several months to replace. This can be given concurrently with erythropoietin to ensure sufficient iron for increased rates of erythropoiesis.

Blood transfusions in those without symptoms is not recommended until the hemoglobin is below 60 to 80 g/L (6 to 8 g/dL). In those with coronary artery disease who are not actively bleeding transfusions are only
recommended when the hemoglobin is below 70 to 80g/L (7 to 8 g/dL). Transfusing earlier does not improve survival. Transfusions otherwise should only be undertaken in cases of cardiovascular instability.

A 2012 review concluded that when considering blood transfusions for anaemia in people with advanced cancer who have fatigue and breathlessness (not related to cancer treatment or haemorrhage), consideration should be given to whether there are alternative strategies can be tried before a blood transfusion.

The objective for the administration of an erythropoiesis-stimulating agent (ESA) is to maintain hemoglobin at the lowest level that both minimizes transfusions and meets the individual person's needs. They should not be used for mild or moderate anemia. They are not recommended in people with chronic kidney disease unless hemoglobin levels are less than 10 g/dL or they have symptoms of anemia. Their use should be along with parenteral iron (4-6).

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