

Literature review on why people suffer from iron deficiency anemia

[Technology](#), [Development](#)



Introduction

It is approximated that about one billion people in the world today suffer from iron deficiency anemia (Sloan, Jordan, & Winikoff, 2002). There are many causes of this disease that have already been identified such as poor diet, menses, excess bleeding in the intestine, and inability of a person to absorb iron among others. However, the question that remains to be answered is why many people continue to be affected despite much information about the disease that is already available.

Background

Iron deficiency anemia is a type of anemia that occurs due to loss of iron in the body that may be caused by various reasons. The common causes of iron loss include intestinal bleeding, menses, and low intake of iron in the diet among other causes (Sloan et al., 2002). When one is experiencing iron deficiency, hemoglobin is not formed in the blood and yet it is very important in the body since they play a crucial role in the transportation of oxygen in the body. Provan (2004) argues that about thirty percent of the world population is affected by iron deficiency. Deficiency of iron is the major cause of anemia in the whole world since it accounts for about 50% of the cases of anemia (Murray, 2010). Different nutrition researchers have shown varying figures of the people who are already suffering from this disease but it is certain that approximately one billion people in the world are suffering from anemia (Sloan et al., 2002). The deficiency is more prevalent in women and children compared to men in both developed and developing countries (Ferreira et al, 2007). For instance in developed countries approximately

20% of all women in the age bracket of bearing children are suffering from this disease compared to 3% of all men (Povan, 2004). Iron deficiency anemia is a later stage of iron deficiency which starts with iron deficiency depletion in the body and end with this disease which affect the functioning of different organ systems in the body. Though a lot of research has already been done to understand the causes and treatment of iron deficiency anemia, the number of people who are suffering from this disease is still high thus calling for more research to know why these cases continue to increase despite availability of information about it.

Existing research

According to Murray (2010), iron nutrients are very essential in the living organisms since they are the main component of transporting oxygen and many enzymes that are required for energy production in the body. Murray continues to argue that a normal human being requires 2mg of iron to cater for normal loss through physiological loss of the body fluids (Sloan et al., 2002). Thus a huge blood loss will lead to low number of hemoglobin in the blood which may affects the normal functioning of the body systems. There are many reasons why people suffer from iron deficiency anaemia depending with gender, class, and health status of a person. Blood loss is the major reason why many people suffer from this disease (Li, 2009). In the human body, iron is contained in the red blood cells and when one loses blood, a lot of iron contained in these blood cells is lost. Many women experiences heavy blood loss during menstruation which causes them to be more vulnerable to this disease compared to men. Women from less developed countries are not

able to buy food that can help them to regain the lost iron due to their financial constraints thus contributing a large percentage of patients suffering from this disease. Other problems in the body such as hiatal hernia, peptic ulcer, colorectal cancer or colon polyp can cause this disease (Murray, 2010). Some people also suffer from gastrointestinal bleeding which may lead to slow but chronic blood loss.

Another reason why many people are suffering from this disease is lack of sufficient iron nutrients in their diet (Ferreira et al., 2010). Due to financial challenge especially in developing countries, many people do not eat foods which are rich in iron such as eggs, meat, green vegetables among others. This exposes many of them to the risk of this disease since their body will have low levels of iron than required. For instance, there are some vegetarians who do not take enough iron in their foods while other people may have a poor eating pattern due to aging or alcoholism thus exposing them to this disease. For proper growth and development, everybody including adults requires enough iron in their body and failure to have required amount will automatically expose one to this disease. Povan, (2004) further insists that there are some diets that may expose one to this disease; they are foods containing low fats, high fiber, and sugary foods. High fiber diets may slow the process of absorbing iron while sugary foods have low levels of iron. Cow's milk also has low level of iron and infants that only depend on this milk for the first one month of their life may easily lack sufficient iron in their body (Sloan et al., 2002). In the diet, iron exists in three different forms which include ferric iron, haem iron and soluble iron

(Murray, 2010). Most of the diets are rich in ferric iron which is not available for absorption in large quantity. It is also worth noting that absorption of iron is affected by other components in the diet such as vitamin C, fibers and tea among others. Alcohol and vitamin C promote absorption of iron in the body while fiber and tea with tannic acid reduce its absorption (Murray, 2010).

The third cause of iron deficiency anemia is inability of a person to effectively absorb iron in their body system due to genetic factors, and diseases (Ferreira et al., 2007). Iron in the food taken is absorbed in the small intestine into the blood stream where it is then processed for various uses in the body. Disorder in the intestine like the celiac disease may affect the ability of a person to effectively absorb nutrients found in the digested food. This can result to low levels of iron in the body and hence suffer from this disease. Some people may have their small intestine removed or by passed through surgical operation thus affecting their ability to get iron as well as other nutrients (Murray, 2010).

Sloan et al., (2002) highlights another cause of this disease as pregnancy, a period where bodies of women requires increased volume of blood and number of haemoglobins to cater for themselves as well as for the fetus they are carrying. At the period a woman is pregnant, a lot of iron nutrients are required from their stores to help in formation and development of the fetus. If the woman does not have sufficient intake of iron, then there are high chances of suffering from this disease.

Discussion

Low in-take of foods rich in iron has also caused low levels of iron in the body especially among the children and vegetarians. Many people especially in the developing economies can afford daily amount of iron in the body since they eat diets that are mostly rich in carbohydrates rather than balanced diet. Growing children also lack enough iron in their diet though their body require it in plenty for their growth and development. This explains why there are so many cases of iron deficiency anemia among children (Li, 2009). Pregnant women are also vulnerable to this disease more than many other groups due their huge loss of blood during child birth and high requirements of iron in their body to help in the development and formation of the unborn fetus.

The studies which have already been carried on the reasons why people suffer from iron deficiency anemia are very comprehensive since they analyse all the possible causes, treatments, and methods that can be used to prevent the occurrence of this disease. Good eating habits for minimizing cases of anemia are also known making it possible to prevent the disease rather than to cure it. However, there seems to be no accurate figures of the number of people who are affected by this disease from all over the world since different scholars give different approximations. Some scholars argue that about 30% of the world population is affected by this disease while others give an approximate figure of about one billion people globally. Secondly, despite the fact that a lot research has been done on the causes, treatment and prevention of this disease, many people continue to be

affected. Any one would expect the number of anemia cases to go down since the necessary actions are taken to prevent and treat the disease. However, in reality, many people continue to be affected which implies that more research need to be done to look at the possible reasons for this trend and the relationship that exist between peoples' lifestyles and the already known causes of this disease.

Conclusion

Iron deficiency anemia is caused by low levels of iron in the body that may result from huge blood loss during menses and child birth among women, poor eating patterns and intestinal disorders. Though a lot of research has been done about the causes, treatment and prevention of the disease, people continue to be affected which calls for more reach to be done about it.

References

- Ferreira, M., Mônica da S., Bertolino, N., Malafronte, S., et al. (2007). Anemia and Iron Deficiency in School Children, Adolescents, and Adults: A Community-Based Study in Rural Amazonia. *American Journal of Public Health*, 97(2), 237-9. ISSN: 00900036. Retrieved from: <http://search.proquest.com/docview/215080774/130F05E03959CE3044/1?accountid=45049>
- Li, Y., (2009). Iron deficiency and its impact on academic achievement. *China Agricultural Economic Review*, 1(3), 245-259. DOI: 10.1108/17561370910958837

Murray, J. (2010). Iron deficiency anaemia. GP, 30-31. ISSN:

02688417 Retrieved from:

<http://search.proquest.com/docview/816474616/130F056166DB8F5E49/1?accountid=45049>

Provan, D., (2004). Iron deficiency anaemia. GP, 57. ISSN NO: 02688417.

Retrieved from:

<http://search.proquest.com/docview/225182573/130F056166DB8F5E49/2?accountid=45049>

Sloan, L., Jordan, E. & Winikoff, B. (2002). Effects of iron supplementation on maternal hematologic status in pregnancy. American Journal of Public Health, 92(2), 288-93. ISSN NO.: 09000936 Retrieved from:

<http://search.proquest.com/docview/215110997/130F05A0934B8FE02E/1?accountid=45049>

Proquest username: 008BW87kk7, password: WELCOME