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IRON DEFICIENCY AND ANAEMIC PREVENTION IN WOMEN

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Abstract

As per the World Health Organization, 60 percent of pregnant mothers in underdeveloped nations are anaemic. Where large-scale programmes have been reviewed, maternal anaemia prevalence has not significantly decreased despite the fact that the majority of ministries of health in poor countries have policies to give pregnant women iron in the form of a supplement. A significant public health issue for low- and middle-income nations, anaemia in women of reproductive age has a long-term detrimental effect on women's health, the health of their children, and the economic development of the country. Due to lack of awareness or poor diet, the majority of women nowadays are anaemic. Even the clinical term for anaemia is unknown to women. Women who visit prenatal care facilities are aware of iron deficiency anaemia and take iron supplements, but they are unaware of the significance of these supplements for female health. Most nations worry that consuming too much iron could result in excessive blood and complicate birth. Women's awareness of anaemia's effects on their physical health, particularly fatigue, an improvement in appetite, a growing understanding of the advantages for the foetus, and a resulting rise in demand for iron deficiency and anaemia prevention and treatment are all contributing factors.

Keywords: Iron, deficiency, Anaemia, Nutrition, Women

1. Introduction

Over 800 million women globally suffer from anaemia. Since 52 percent of non-pregnant women of reproductive age are believed to be anaemic in India, it is categorised as a major public health issue . Iron deficiency is the main cause of anaemia, yet it seldom occurs on its own. More typically, it coexists with a number of other causes, including haemoglobinopathies, parasite infections, malnutrition, and malaria. By area, iron deficiency plays a different role in the development of anaemia. Due to the high prevalence of HIV, hookworm, malaria, and other infectious diseases, among premenopausal women in India, this percentage rises to over 70%.

Future generations will also be negatively effected by iron deficiency because it increases the incidence of child mortality, premature birth, and preterm delivery, and iron insufficiency in newborns after 4 months of age . In Africa and Asia, respectively, anaemia causes between 3.7 and 12.8% of maternal fatalities Whilst expecting and after giving birth,with iron deficiency being the primary cause . Additionally, it causes intellectual underperformance and cognitive deficiencies in school-aged children . Successful iron supplementation eliminates anaemia as a public health issue in communities where iron deficiency is widely prevalent, with the exception of those with high incidence of malaria, HIV infection, or hookworm infection (Coad *et al*., 2014).

2. Literature Studied

Anaemia still exists today, despite the fact that India was one of the first developing countries to introduce a National Nutritional Anaemia Prophylaxis Program in 1970. This programme included antenatal nutrition

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counselling and the distribution of Iron and Folic Acid (IFA) supplements, which contain 100 mg iron and 0.5 mg folic acid and are meant to be consumed daily by all pregnant women during pregnancy and lactation (Ministry of Health and Family Welfare, 1991, Ministry of Women and Child Development, 2007, National Institute of Health and Family Welfare, 2012)

The significant frequency of iron-deficiency anaemia in women has been attributed to the 3–4% low iron absorption in India's fiber-rich, vegetarian diet. Indian ladies regularly ingest less iron as well (Ramachandran , 2007). According to statistics from the National Nutrition Monitoring Board surveys carried out in nine states between 2004 and 2005, women's iron consumption is around very little of the minimum daily need. In 2006, the National Nutrition Monitoring Bureau.

More over a third of Indian women of reproductive age have a Body Mass Index (BMI) of less than 18.5 which suggests undernutrition (IIPS and Macro International, 2007). Anaemia is a condition that appears early in life in Indian women; frequency in adolescent females is 56%. due to a lack of education and bad dietary habits (IIPS and Macro International, 2007). Women in India are unable to consume nutritious meals due to a discrimination problem.

In a technical working paper published by Bentley and Parekh, the perspectives of anaemia among pregnant women from the Indian states of Haryana, Gujarat, Tamil Nadu, and Karnataka were investigated using a number of techniques (1998). They noticed that in their native tongue, ladies commonly made reference to clinical symptoms. Typically, women were aware of the link between anaemia, a poor diet, and a high birth rate. They were also aware of the availability of IFA and the advice to consume it while pregnant, but they disregarded these recommendations because they were concerned about the side effects of iron supplements and were unaware of the advantages for their own health.

Due to illiteracy and poor dietary practises, anaemia is a highly common disease among Punjabi women. Anaemia and iron insufficiency were found in about half of the women. Due to this, individuals experience problems throughout pregnancy, including blood loss during childbirth and their baby being born anaemic.

In order to gain knowledge for creating effective health education and communication interventions, this qualitative study in Punjab looked at anaemia and the behaviours of pregnant women, particularly those from low-income groups.

3. Effect Of Anaemia Due To Lack Of Iron

Iron deficiency anaemia is associated to increased morbidity and foetal death during pregnancy and has a negative impact on both the mother's and foetus' health. Breathing issues, fainting, exhaustion, palpitations, and trouble sleeping are common among affected mothers. Additionally, they run a higher risk of bleeding, pre-eclampsia, and perinatal infections. Additionally, behavioural issues and postpartum cognitive impairment were reported.

Intrauterine growth retardation, preterm, and low birth weight are examples of adverse perinatal outcomes that all have high mortality risks, especially in underdeveloped countries. First-trimester iron insufficiency is more detrimental to foetal growth than anaemia that appears later in pregnancy. The possibility of an early labour is also genuine. All parts of these connected issues, which are more prevalent in the developing world, are greatly influenced by low socioeconomic position. All these influencing and connecting aspects should be taken into account in any effective public prevention or treatment programme (coad *et al*., 2014), (Ramakrishnan *et al*., 2008).

4. Causes Of Lack Of Iron

Insufficient dietary iron or low iron absorption from a diet heavy in inhibitors can both contribute to iron insufficiency . Diets that are high in cereals and legumes and poor in meat and fruit are more likely to have low bioavailability. Hepcidin-raising conditions limit the amount of iron that is available to pathogens as well as to host cells and tissues for biological purposes. Acute infections benefit from this, but chronic diseases can cause severe and long-lasting iron shortage. Additionally, the iron status may be harmed by the rising prevalence of

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obesity, a chronic inflammatory illness. Despite the possibility of upregulating DMT-1 to boost dietary iron absorption. The amount of potential compensation is minimal. Continuous and persistent iron losses cannot be balanced by increasing iron absorption. The most important cause of iron deficiency in women of reproductive age is heavy menstrual blood loss.(coad et al., 2014) ,(Ramakrishnan *et al* 2008)

5. Conclusion

Women are more susceptible to iron deficiency because their up-regulation of iron absorption is limited and may not be enough to replace the iron lost during menstruation.. Any additional factor affecting iron balance, such as poor iron absorption, inflammatory diseases, increased blood loss, or higher demands, such as closely spaced pregnancies, can lead to an iron loss that cannot be made up for by improved absorption. However, excessive iron may cause oxidative damage or encourage the development of infections.

The leading factor causing anaemia in pregnancy in impoverished nations is still ron deficiency. Therefore, it is impossible to emphasise its increased risk of low birth weight, premature birth, and maternal morbidity. With the exception of the mentioned limitations, prophylaxis with iron supplements and the health of mothers and their children may be improved by iron fortification of meals.

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