INTRODUCTION

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Anemia is one of the most common hematological disorders that occur at pregnancy. It has consequences on human health, social and economic development, and associated with increased risk of morbidity and mortality, especially in pregnant women ***(World Health Organization (WHO), United Nations International Children's Emergency Fund (UNICEF) , and United Nations University(UNU) , 2001; Bagchi, 2004; Kraemer& Zimmermann, 2007),*** in which the World Health Organization (WHO) estimates that approximately two billion people are anemic based on hemoglobin concentrations below recommended thresholds ***(Goddard, et al., 2010).***

Anemia is defined as low hemoglobin (Hb) concentration in blood, which can be caused by several factors. Beside diseases that lead to loss of blood including malaria, hookworm infections and schistosomiasis or inherited conditions, such as thalassaemia, nutrition plays most important role. Vitamin deficiency like B12, folic acid and riboflavin influence the formation of Hb however the most important nutritional factor is iron deficiency which represent the most frequently occurring micronutrient deficiency in developed and less developed countries ***(Abd El-Mouty, 2010).***

Iron deficiency is the most common cause of anemia, and is one of the leading risk factors for disability and death worldwide, affecting an estimated 2 billion people ***(McLean, et al., 2007).*** Nutritional iron deficiency arises when physiological requirements cannot be met by iron absorption from diet. Dietary iron bioavailability is especially low in populations consuming monotonous plant-based diets ***(Zuckerman, 2008).***

The World Health Organization (WHO) estimates the prevalence of anemia among pregnant women to vary between 53.8% and 90.2% in developing countries, while in developed countries; it had estimated to be 8.3%. However, many of these women were already anemic before being pregnant., The WHO estimates the prevalence of anemia to be 47.5% among non-pregnant women in developing countries and 19% in women in developed countries. Furthermore, the estimated prevalence of anemia varies throughout the course of pregnancy. In the USA, for example, the prevalence of anemia among pregnant women had estimated to be 1.8% in the first trimester, 8.2% in the second trimester, and 27.4% in the third trimester ***(Al-Farsi, et al., 2011).***

During pregnancy, women need three to six times more iron to support fetal and placental growth. This increased iron demand often results in maternal IDA. Maternal IDA is associated with adverse health outcomes, including low infant birth weight. In one study, over 20% of maternal mortality had attributed to anemia; another study found that 14% of infants born to iron-deficient mothers had at least one indicator for iron deficiency at birth. Iron deficiency at birth has also been associated with postpartum depression and developmental delays in children. Maternal depression has been shown to improve 25% with iron treatment ***(Beard, et al., 2005).***

As many as 80% of pregnant women are anemic, they are generally women from lower socio-economic groups in developing countries as well as pregnant teenagers. Women who experienced heavy periods and those who became pregnant soon after the birth of a child are at particular risk of becoming anemic in pregnancy. Education, household size, income, age, parity, birth spacing, antenatal care and Body Mass Index (BMI) are anther risk factors of iron deficiency anemia in pregnancy **(Helfand, et al;2006).**

The nurse plays an important role in early detection and management of IDA. The role of nurse has focused on early recognition and detection of the women at risk, counseling related to antenatal visits; diet; women's responsibilities in iron supplementation, nursing care for anemic women during antenatal period; labor; and post partum period ***(Dudek, 2005).***