

Anemia in Pregnancy in the United Arab Emirates

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Abstract

Anemia in pregnancy is a very common and persistent public health issue globally, affecting almost 24.8% of population around the world. Anemia is responsible for a noteworthy prenatal and maternal deaths around the world but even more greatly in developing countries, it is also a great contributor to low birth weight which is a cause in increased percentage of infant mortality. Nevertheless, a mild to moderate iron deficiency does not appear to cause a significant effect on fetal hemoglobin concentration. An Hb level of 11 gr/dl in the late first trimester and also of 10 gr/dl in the second and third trimesters are suggested as lower limits for Hb concentration. The aim of this paper is to explore and shed light on the critical nature of anemia in pregnancy on the mother and the fetus. In addition, we used the literature review to explore the prevalence of anemia around the world, the causes, symptoms and signs, as well as diagnosis and the different treatments available. There are basically no literature review concerning anemia in pregnancy in the UAE, so we aim to add knowledge to existing literature. This was achieved by conducting a survey on 50 women in Abu Dhabi emirate.

Keywords: Anemia, Pregnancy, hemoglobin, maternal health, UAE

Introduction

Anemia is characterized by the reduction in the total blood cells or hemoglobin, or the blood's decreased ability to carry oxygen. Anemia can arise in all stages of the life cycle, but it is more predominant in pregnant women and young children. Iron deficiency anemia (IDF) was observed to be the most significant contributing factor to global burden of disease in 2002 (Kassebaum, 2014, Benoit, McLean, Egli, & Cogswell, 2008). Anemia in pregnancy is a condition that rises up during pregnancy or the period after it. Physiological changes that happen naturally during pregnancy affect the hemoglobin (HB) by reducing its concentration. Thus, making anemia in pregnancy one of the most frequent complication associated with pregnancy, offering several health risks to mothers and their child. In this paper, the prevalence of anemia in pregnancy will be discussed. In addition, to types of anemia and the causes, the risk factors of anemia, and possible treatment. Moreover, the prevalence and causes of anemia in pregnant women in Abu Dhabi will be discussed. This paper contains mixed methodology that are literature reviews and a survey for pregnant women to fill out.

Methodology

Type of Research

The type of research that will be used in this study is qualitative research and quantitative research. Qualitative researchers aim to gather an in-depth understanding of anemia in pregnant women and its prevalence around the globe. In addition to understanding the possible causes and risk factors surrounding anemia in pregnancy. This will help us to clearly comprehend the solutions to solving or help minimize this phenomenon. Moreover, we will also observe the phenomenon through observations in numerical representations and statistical analysis. Along with questionnaires that will be given out to respondents for the statistical representation of the findings in the study. As well as, comparing the UAE population in the aspects discussed above to the rest of the populations around the world.

Sampling Method

The research sampling method that is used is random sampling. This helped us gain more scientific result that could be used to represent the whole population. We had specifically chosen 'Universal Hospital' Abu Dhabi, UAE, patients as we had worked closely with the hospital. Thus, we were given the utmost freedom to interact and survey the patient. We had obtained a verbal consent to administer the questionnaire to the patients, and we made sure to send a sample copy of the questionnaire that we used. The data collection procedure was conducted during the Hospitals working hours on Thursday to insure including as much patients as possible.

Respondents

The randomly selected respondents in this paper will be all the residents of Abu Dhabi. The respondents were asked for consent and approval to answer the questionnaire until we've reached 50 respondents.

Questionnaire

The survey inquires about information which discusses the socio-economic and demographic as well as the medical background of the patients. It also has questions about the pregnancy as whole such as: type of pregnancy, and number of previous pregnancies.

Statements that are perceived to be factors that effect and influence women's risk of having anemia in pregnancy.

Results

Ages of the last child born by the pregnant

The figure 1. illustrates the ages of the last child born by the pregnant women who were surveyed. 50% of the women stated that their last-born child was older than a year, 13% of them had a 1-year old child, and 37% did not have preview children before this pregnancy.

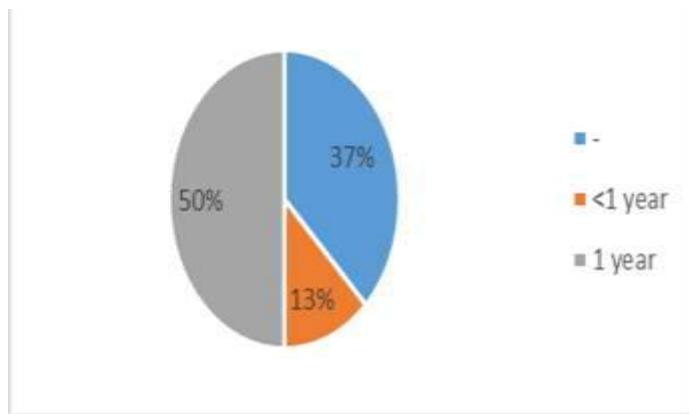


Figure 1. Age of last child born

Working status for the women

The figure 2a. depicts that current working status for the women being interviewed. The data obtained were similar as 57% of women stated that they are currently working, and 43% of them said that they were not working and were house wives.

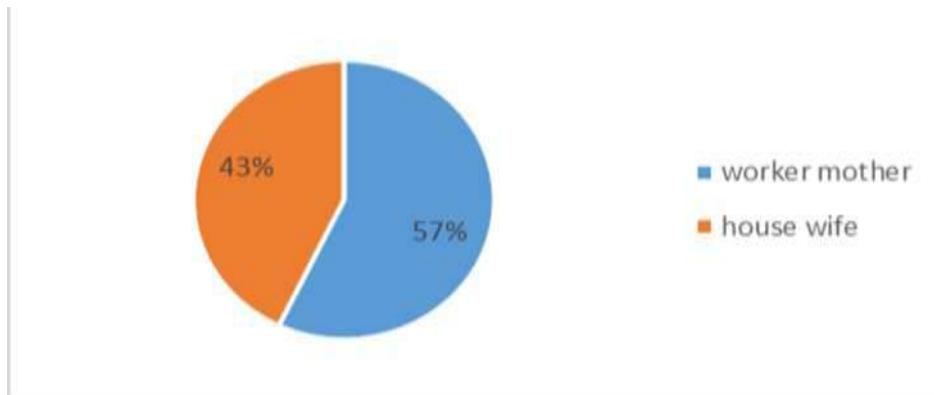


Figure 2. shows the current status of the respondent

Type of diet a woman is on and being anemic

Moreover, figure 3. describes the relationship between the type of diet a woman is on and being anemic. According to the data obtained, 71% of vegan women were anemic in comparison to the 29% anemic women who follow a normal diet. In addition, it was shown that only 14% of vegan women were not anemic, compared to 84% of the ones who follow a normal diet.

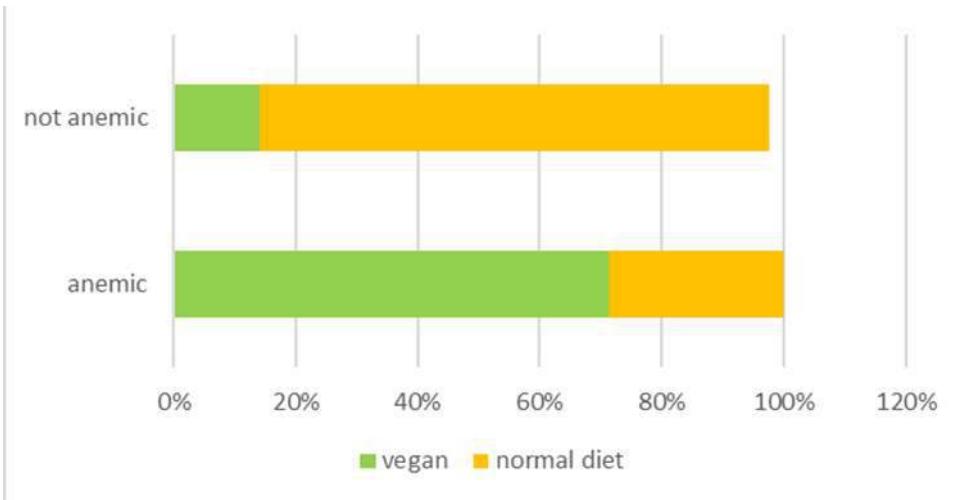


Figure 3. shows relationship between type of diet and being anemic

Consumption of tea and anemia

This figure 4. Illustrates the connection between anemia and the consumption of tea. 23% of women consumed tea twice a day and none of them were anemic. Moreover, from the ones who consume tea 3 times a day 29% of them were anemic and 58% were healthy. Women who consume tea 4 times a day however showed the highest percentage of anemia as 57% were

anemic compared to the 23% who were not. From the ones who consume tea more frequently, 14% were anemic and 12% were healthy.

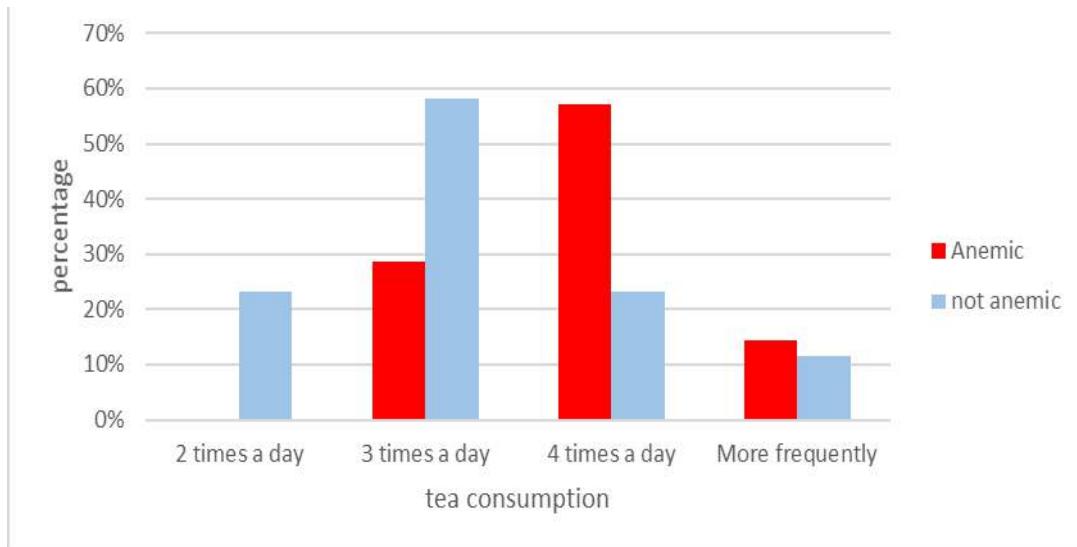


Figure 4. shows the relationship between tea consumption and anemia

Anemia and nausea

The figure 5 represents the relationship between anemia and nausea. 71% of anemic women suffer from nausea compared to 29% of them who do not suffer from it. On the other hand, 26% of the healthy women reported nausea in comparison to the 91% of healthy women who did not suffer from it.

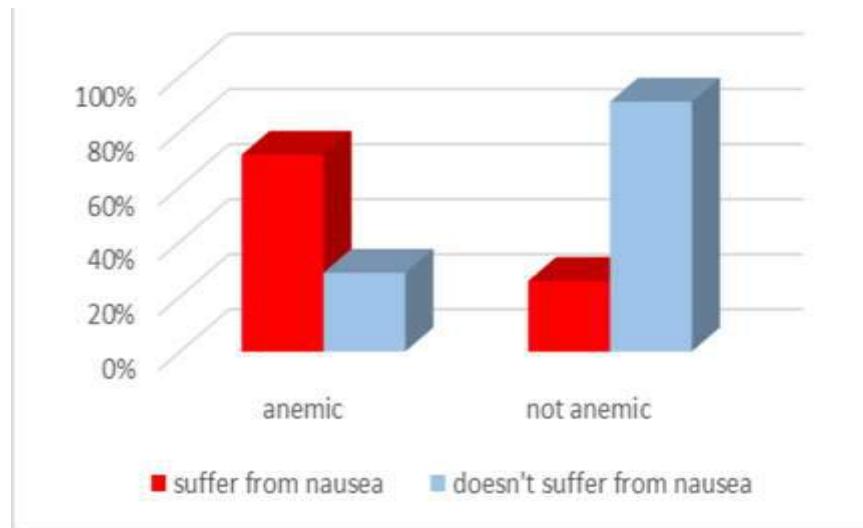


Figure 5. shows relationship between anemia and nausea.

Discussion

The survey showed that 7 out of 50 pregnant women are anemic. 14% is an indication that the anemia in pregnancy is a major problem in the region. The main concern is women's diet, and this should be monitored before she plans to get pregnant to make sure that she gets all the nutrients that she needs for a healthy pregnancy. The results showed that 11% of the respondents are vegan. Vegan women are more prone to anemia than other women, since they don't get enough heme iron that's exclusively found in meat, poultry, and seafood. Even normal women who are at high risk, normal diet is not enough. It was reported that the low nutritional status exaggerated by low body mass index (BMI) in women had the association with anemia, in which health care providers needed to a necessitates intervention to prevent any complications that might occur because of poor diet. (Liabsuetrakul, 2011). The study showed that women who consumed red meat or chicken two or more times per week before getting pregnant possessed higher hemoglobin concentrations in comparison to whom did not (Baig-Ansari, 2008). Iron supplements and Folic acid before pregnancy is a must for all women to have a higher blood count. In addition, there's a definite correlation between anemia and tea drinking and that's clearly because tea consumption limits the non-heme iron absorption in the blood. The fact that iron absorption can be reduced by tea consumption has been recognized for many years (Disler, et al; 1975) with the inhibitory effects predominantly facilitated by the marked iron-binding properties of the phenolic compounds bearing catechol groups in tea (Zijl, et al; 2000)

Conclusion

In conclusion, this research aims to shed light on anemia in pregnancy in several aspects worldwide using literature review, and specifically in the UAE through a survey. Anemia is a very prominent maternal and fetus related issue that causes a lot of complications and grieve to the families affected. Anemia in pregnancy is an issue that can be solved and eradicated by raising awareness firstly and then by treatment. Women should be cautious in the period of pregnancy especially in a dietary aspect. Thus, it is our duty as public health students to raise awareness on these topics and reach as much people as possible.

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