

Anemia in pregnancy: A survey of pregnant women in Hyderabad, Sindh.Amber Mahmood¹, Saira Dars², Ali Raza Memon³¹Medical Research Centre, Liaquat University of Health & Medical Sciences, Jamshoro. Pakistan.²Department of Obstetrics & Gynaecology, Liaquat University Hospital, Sindh, Pakistan.³Department of Biochemistry, Liaquat University of Medical & Health Sciences (LUMHS) Jamshoro, Sindh,ambermahmood47@outlook.com

Abstract: Background & objective: Prevalence of anemia in Pakistan is among the highest in the world. The aim of this study was to evaluate the prevalence and relationship of anemia in pregnancy. **Methods:** A survey type study was conducted from January 2013 to August 2013, on 100 pregnant women who attended antenatal care at Bhitai Hospital Unit No 5, Latifabad, Hyderabad, Sindh. Interview-based questionnaire, clinical history, and laboratory tests were used to obtain data. **Result.** The prevalence of anemia was Majority were mild type anemia. The frequency of anemia was found to be in 20-25 years 15%, in 26-30 years 22% and in 30-40 years 63%. **Conclusion:** The prevalence of anemia was high; Low income, malnutrition was associated with anemia. Early detection and effective management of anemia in pregnancy can lead to substantial reduction in under nutrition in childhood, adolescence and improvement in adult height.

[Amber Mahmood, Saira Dars, Ali Raza Memon. **Anemia in pregnancy: A survey of pregnant women in Hyderabad, Sindh.** *Rep Opin* 2014;6(5):1-3]. (ISSN: 1553-9873). <http://www.sciencepub.net/report>. 1

Key words: Anemia, Pregnancy, Hyderabad, Survey

1. Introduction

Anemia in pregnancy comprises a major public health problem in developing countries. It was reported national health survey of Pakistan that 43–47% of rural and 35–40% of urban area is suffering from anemia. In our society majority of women start their pregnancy with some degree of iron deficiency anemia because of poor nutrition, short interpregnancy interval, and multiparity (1) World Health Organization (WHO) data confirm that approximately 10.8 million in African countries, 9.7 million in the Western Pacific and 24.8 million pregnant women in South East Asia are anemic; the highest number being in South East Asia. (2, 5). Prevalence of anemia in Pakistan is among the highest in the world and it is a global public health problem affecting both developing and developed countries with major consequences for human health as well as social and economic development. It occurs at all stages of life cycle, but is more prevalent in pregnant women. It occurs when the concentration of hemoglobin falls below what is normal for a person's age, gender and environment, resulting in the oxygen carrying capacity of the blood being reduced (3, 7). The effect of anemia during pregnancy on maternal and neonatal life ranges from varying degrees of morbidity to mortality (4, 6).

Folate deficiencies and other causes account for the major proportion of the remaining anemia during pregnancy, growth of the fetus and placenta beside larger amount of circulating blood in the expectant mother, lead to an increase in the demand for nutrients, especially iron and folic acid. (4, 8) The aim of this study was to evaluate the prevalence and relationship of anemia in pregnancy who antenatal care at Bhitai Hospital Unit No 5, Latifabad, Hyderabad, Sindh.

2. Materials And Methods

A survey type study was conducted; the duration of study was eight months from January 2013 to August 2013, on 100 pregnant women who attended antenatal care at Bhitai Hospital Unit No 5, Latifabad, Hyderabad, Sindh. Interview-based questionnaire and the stages of each pregnancy were noted, clinical history, and laboratory tests were used to obtain data.

3. Results

A total of 100 pregnant women aged 20-40 years were studied. Table 1 and figure 1 shows the relationship between type of anemia and age of pregnant women, and in table 2 with figure 2 shows the prevalence of anemia by age of the pregnant women.

Table 1: Relationship between type of anemia and age of pregnant women.

Age years	Number	Mild anemia	Moderate anemia
20-25	15	9	6
26-30	22	10	12
30-40	63	9	54

Table 2: Prevalence of anemia by age of the pregnant women.

Age years	Anemia	Non-Anemia	Total
20-25	6	9	15
26-30	12	10	22
30-40	54	9	63

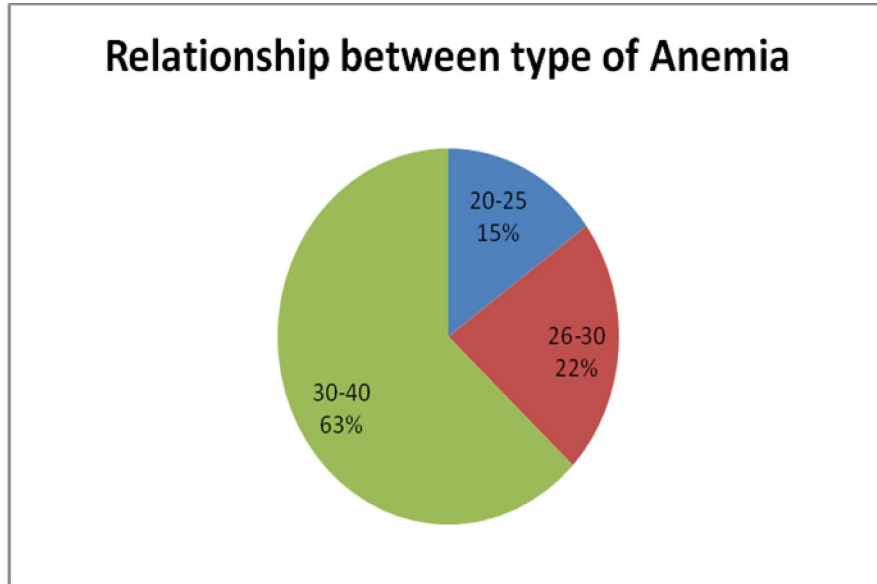


Fig. 1: relationship between type of anemia and age of pregnant women.

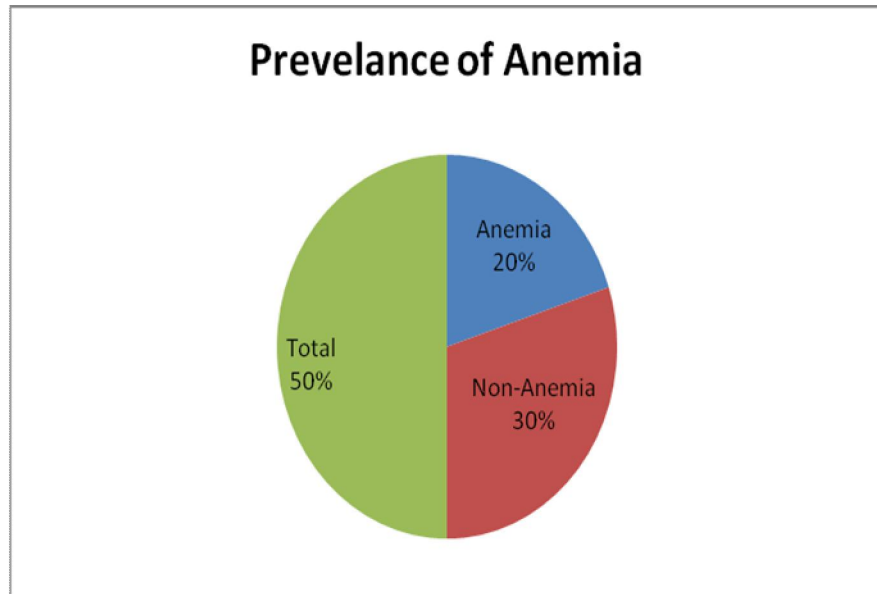


Fig: 2. Prevalence of anemia by age of the pregnant women.

4. Discussion

Anemia is the commonest medical disorder in pregnancy. Its prevalence may be as high as 90% in some parts of Asia. Anemia especially if severe is directly or indirectly responsible for 60% of maternal deaths. Most of our women entering pregnancy are already anemic, with deficient iron stores and poor dietary habits. Pregnancy worsens the anemia and causes complications like PPROM, preterm labour, IUGR and increases the morbidity and mortality during pregnancy and labour. (9)

Worldwide, pathological anemia is the most common medical disorder of pregnancy. Iron deficiency is the most common haemostatic deficiency in pregnancy followed by folate deficiency (10, 11).

In this study population of Hyderabad Sindh, the prevalence of maternal anemia was more than 70% in 100 cases. It was observed that majority of anemia is moderate, according to this study; anemia was mostly recorded at the range of 30-40 years old. The prevalence of anemia pregnant women in Hyderabad, Sindh has showed in this study is certainly very high and is continue moderate public health problem. If this issue is not addressed properly then it would become a severe problem. Maternal anemia is associated with poor intrauterine growth and increased risk of preterm births and low birth weight rates. This in turn results in higher perinatal morbidity and mortality, and higher infant mortality rate. Parental height and maternal weight are determinants of intrauterine growth and birth weight. Thus maternal anemia contributes to intergenerational cycle of poor growth in the offspring. Early detection and effective management of anemia in pregnancy can lead to substantial reduction in under nutrition in childhood, adolescence and improvement in adult height.

Conclusion

Early detection and effective management of anemia in pregnancy can contribute substantially to reduction in maternal mortality. It is suggested that treatment should effort to perform advance investigation on anemic pregnant women to classify the etiology.

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