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Anaemia among pregnant women: prevalence and determinants

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ABSTRACT

Malarial infection, occupation, urinary tract infection, place of residence and alcohol consumption are associated with anaemia among pregnant women. There is prevalence of anaemia in pregnant women. Anaemia during pregnancy is a public health problem in developed and developing countries. Pregnant women are at risk of developing anaemia due to increased nutrient needs which include iron, folate and Vitamin B12 and haemo-dilution during pregnancy.

Keywords: anemia, pregnant women, prevalence, determinants

INTRODUCTION

Anaemia during pregnancy is a public health problem in developed and developing countries. Pregnant women are at risk of developing anaemia due to increased nutrient needs which include iron, folate and Vitamin B12 and haemo-dilution during pregnancy [1-7]. Reported prevalence of anaemia among pregnant women in Uganda range from 7.4% to 63.1% and prevalence of 62.8% was reported in 2016 at Mbarara Regional Referral Hospital According to Mbarara Regional Referral Hospital Records, from January 2022 to February 2022, approximately 34.9% of pregnant women attending antenatal clinic were diagnosed with anaemia. About 20 cases of adverse perinatal outcomes and 25 cases of adverse maternal outcomes due to anaemia [8]. The consequences of anaemia during pregnancy to pregnant women include; fatigue, weakness, difficult breathing, dizziness, drowsiness, skin paleness, lack of productivity and death in severe cases when not intervened appropriately [9-11]. Low birth weight, preterm birth and perinatal death are also adverse perinatal outcomes whose risk is increased by anaemia during pregnancy if left untreated [12].

Prevalence of anaemia among pregnant women

Pregnant women are a risk group of the public health problem anaemia with 32 million pregnant women affected by anaemia globally [13-14]. Studies show that anaemia is a health challenge in the pregnant women group. In 2014, 63% of pregnant women in central India were found to be anaemic. Still in another study conducted in India, 100% prevalence of anaemia among pregnant women was observed since no one met the standard haemoglobin level of >11.0 g/dL during pregnancy. According to this same article prevalence of mild, moderate and severe anaemia were 52.73%, 40.97% and 6.28% respectively [15].

In Bangladesh, prevalence of moderate and severe anaemia were 70% and 30% among pregnant women. Another Bangladesh study reported in 2020 that, 51.6% pregnant women were anaemic with prevalence of mild, moderate and severe anaemia 23.2%, 26.3% and 2.1% respectively [16].

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Determinants of anaemia among pregnant women Malarial infection

Malaria parasites attack the red blood cells and causes hemolytic anaemia [17]. Several studies has reported association of malaria with anaemia [25-29]. According to reports from a Ugandan study conducted in Mpigi District, malaria was found associated with anaemia with odds ratio of 1.32. Another study at Mbarara Regional Referral Hospital also showed association between malarial parasitaemia and anaemia among pregnant women [18].

Human Immuno-Deficiency Virus (HIV) infection

HIV infection was reported to increase the risk of developing among pregnant women in Mpigi District in Uganda with odds ratio of 2.13. Another study from South Africa also supported the above finding which stated anaemia was significantly higher among HIV positive pregnant women than HIV negative pregnant women also showed association between HIV infection and anaemia during pregnancy [19].

Lack of iron supplementation

Lack of iron supplementation during pregnancy increased the risk of anaemia among pregnant women in Uganda by odds of 1.66. In Kenya, lack of folic acid or iron supplementation was found to be significantly associated with anaemia during pregnancy. Low iron/ folic acid supplementation was shown to be a predictor of anaemia during pregnancy Increased iron supplementation was found to be associated with lower risk of developing anaemia during pregnancy [20].

Maternal age

Maternal age was associated with anemia during pregnancy in with pregnant women aged 20 years and below being most anemic [21-23]. Age was also shown to be associated with anemia during pregnancy among women. Pregnant women who were aged 31 years and above were significantly more anemic than the ones aged 18-24 years in Kenya. Another study also in the Ashanti region of Ghana showed association between anemia during pregnancy and low maternal age Mothers aged 35-40 years were shown to be more anemic than mothers aged 34 years and below [24].

CONCLUSION

The prevalence of anemia reported among pregnant women in this study was high. Malaria infection, occupation, urinary tract infection, place of residence and alcohol was found to predispose pregnant women to anaemia.

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