

ABSTRACT

Background: Anaemia during pregnancy continue to be a global public health problem especially in low- and middle-income countries. Despite several antepartum interventions such as iron/folic supplementations, nutritional counselling and deworming among others to reduce anaemia in pregnancy, a significant number of pregnant women still present with anaemia at the time of delivery and is associated with adverse pregnancy outcomes for both the affected women and their offspring. This study therefore, aimed at determining the prevalence, severity and factors associated with anemia among women with term pregnancies who were admitted for delivery at Mbarara Regional Referral Hospital.

Method: We conducted a cross-sectional study at the maternity ward of MRRH and systematically enrolled 399 women with term pregnancies admitted for delivery. Data on socio-demographic, obstetrics, medical and nutritional factors were collected using interviewer guided structured questionnaires, and blood sample was obtained from each participant and Hemoglobin concentrations were determined by Sysmex Automated Hematology analyzer XN – L series. A participant had anaemia if her hemoglobin concentration was less than 11.0 g/dl. Descriptive statistics were presented for Socio-demographic, medical, obstetrics and nutritional characteristics of the women. Prevalence of anemia was presented as the proportion of women whose hemoglobin concentrations were less than 11g/dl. Bivariate analyses were conducted and variables with p value <0.2 , and those which were biologically plausible were entered into a modified Poisson regression analysis model and factors associated with anemia were considered at p value <0.05 . All data analyses were done using Stata version 17.0.

Findings: The mean age of the study participants was 26.36 (± 4.61) years. The prevalence of anemia among women with term pregnancies admitted for delivery at MRRH was 16.0 % (n=64). Majority had mild (48.4%, n=31) and moderate (45.3%, n=29) anaemia, and 6.3% (n= 4) had severe anaemia. The significant factors were ANC contacts <4 ([aPR: 1.93; 95% C.I 1.19-3.13], $p=0.008$ and having positive HIV sero-status (aPR: 1.75; 95% C.I 1.01-3.07, $p=0.049$).

Conclusions: The prevalence of anemia among women with term pregnancies admitted for delivery at MRRH is 16.0 %, which is a moderate public health problem in this setting. HIV positive women and those who attend ANC <4 times are more likely to have anaemia. We recommend all women should have >4 ANC contacts. Those who have had <4 ANC contacts, and those living with HIV should be prioritized for routine Hb estimation at the time of deliver.