ABSTRACT

Background: Cervical cancer is the leading gynaecological malignancy in terms of incidence and mortality in Uganda. Cervical cancer is often complicated by anaemia mainly because of intratumor bleeding and inflammation of chronic disease. Anaemia contributes significantly to both morbidity and mortality in these patients. Timely identification and management of anaemia is critical to the treatment outcomes of cervical cancer. This study, therefore, aimed at determining the prevalence, severity and factors associated with anaemia among women with cervical cancer at Mbarara Regional Referral Hospital.

Methods: We conducted a cross-sectional study and consecutively enrolled 127 women with a histological diagnosis of cervical cancer at Mbarara Regional Referral Hospital from October 2022 to April 2023. We administered a structured questionnaire to obtain data on sociodemographic, clinical and tumour related factors. Hemoglobin concentration for all participants was determined with an automated haematology analyser and a participant was said to have anaemia if the hemoglobin concentration was less than 12 g/dl. A modified Poisson regression analysis was used to determine the factors associated with anaemia.

Results: Out of 127 women with cervical cancer enrolled in this study, 61 (48%) had anaemia. The mean age of the participants was 54.88 (±14.68) years, majority had squamous cell carcinoma (87.4%) and had FIGO stage III cancer (59.8%). Of those who had anaemia, 19 (31.1%) had severe anaemia. At multivariable analysis, age <50years (aPR 1.76, 95% CI: 1.17-2.65) and history of abnormal per vaginal bleeding (aPR 1.61, 95%CI: 1.04-2.49) were significantly associated with anaemia.

Conclusion: Approximately one in every two women with cervical cancer at MRRH has anaemia, a third of whom have severe anaemia. Women less than 50 years of age and those with history of abnormal per vaginal bleeding are likely to have anaemia. We recommend routine surveillance for anaemia in women with cervical cancer to be emphasised especially among those younger than 50 years and those with history of abnormal per vaginal bleeding.