

## **ABSTRACT**

**Background:** About 12.8% and 3.7% of maternal mortality in Asia and Africa respectively is directly attribute-able to anemia. One of the major interventions to prevent anemia and folic acid deficiency is Iron Folic acid (IFA) supplementation. Iron and folic acid supplementation has been the preferred intervention to improve iron stores and prevent anemia among pregnant women, and it may also improve other maternal and birth outcomes. Women should consume folic acid in the peri - conception period as it takes 8 weeks to reach the optimal level of serum folate. Women in Gulu district have the highest incidence of anemia in the country, at 47.1%. This is why it is still considered of public health significance according to WHO given that two out of every 10 pregnant women still succumb to the condition.

**Objective:** The purpose of this study was to assess the correlates of optimal utilization of iron and folic acid supplements among pregnant women attending antenatal clinics in Gulu district

**Method:** This study adopted a mixed methods approach, in which both quantitative and qualitative methods were employed. The study was done in Gulu District among pregnant women seeking antenatal care services in the health facilities of Gulu district. The hospital and the health center IV were purposively sampled. The health centers at level III and II were sampled using a two stage process; one being cluster sampling and the other being simple random sampling. To sample the pregnant women at each facility, still random sample random sampling was used. To sample the focus group discussion participants, a purposive sampling method was used. The research used structured interviews as the data collection method. Focus group discussions were used to collect qualitative data. After cleaning, the data was then exported to SPSS software version 20.0 for analysis. Spearman correlation test was used at bivariate analysis level while binary logistic regression was used at multivariate level.

**Results:** It was found that the majority of the respondents had optimal uptake of IFA 203 (81%). The chances of optimal IFA uptake increased with increasing ANC frequency, women who were attending their fourth visit were 4 times as likely to have optimal IFA uptake (AOR = 4.516, CI = 2.125 - 5.134). Pregnant women who had no history of anemia were twice as likely to have optimal IFA uptake compared to those who had anemia history (AOR = 2.333, CI = 1.013 - 5.373). Pregnant women who had been educated uptake to secondary level were five times as likely to have optimal IFA uptake (AOR = 5.605, CI = 2.063- 7.839). The women who received 30 day supplements, were six times more likely to optimally take IFA supplements (AOR = 6.333, CI = 2.358 – 7.527) compared to those who received supplements that last fewer days.

**Conclusion:** A substantial proportion of pregnant women in Gulu district optimally uptake IFA supplements given to them; this is 8 out of every 10 pregnant women. However given the utmost importance of IFA for every pregnant woman, the 20% who have suboptimal uptake of the IFA require attention as these may at the end of the day contribute to the dire maternal health statistics in the district. Optimal IFA uptake is more significantly correlated to demand side characteristics (individual correlates) and to a less extent, to supply side characteristics (health service correlates).