

ABSTRACT

Background: World Health Organization recommends a birth interval between 33 to 69 months for ideal maternal and neonatal outcomes, In Sub-Saharan Africa 57% birth occurred at an interval less than 33 months. Studies have indicated an increased occurrence of immediate adverse perinatal outcomes among women with Short inter-birth intervals compare to women with optimal inter-birth intervals. However, others studies done showed no significance association between short inter-birth interval and adverse perinatal outcomes.

Objectives: To determine the association between short inter-birth interval and immediate adverse perinatal outcomes among women delivering at Mbarara Regional Referral Hospital

Methods: This was a hospital based comparative cross-sectional study conducted among mother-baby pairs admitted on postnatal ward within 24 hours after delivery at Mbarara Regional Referral Hospital from March 2023 to Jun 2023. The primary exposure was inter-birth intervals and the outcome was immediate adverse perinatal outcomes. Data on the exposure and outcome variables were collected questionnaire. Modified Poisson Regression analysis was used as alternative and proportions were instead reported as the measure of association between Short inter-birth intervals and immediate adverse perinatal outcomes.

Results: In this study we found that short inter-birth interval was significantly associated with immediate adverse perinatal outcomes. Women with short inter-birth interval were 1.46 times likely to have immediate adverse perinatal outcomes compared to women with optimal inter-birth interval, adjusted prevalence ratio (aPR): 1.46; 95% C.I [1.02, 2.09], $p=0.038$. Other factors independently associated with adverse perinatal outcomes were maternal age<20 years, obstetric complications, having a diagnosis of fetal distress and a history of malaria in pregnancy

Conclusion: Short inter-birth intervals is associated with immediate adverse perinatal outcomes.

Other risk factors for immediate adverse perinatal outcomes were maternal age<20 years, obstetric complications, having a diagnosis of fetal distress and a history of malaria in pregnancy. We emphasize the importance of health education and advocacy for utilization of family planning services for optimal inter birth interval.