

ABSTRACT

Background: Short inter-pregnancy interval (IPI) could have adverse influence on pregnancy outcome especially in low income countries. Previous researchers from sub-Sahara Africa have documented an alarming trend of short IPI but evidence is lacking on its impact on pregnancy outcome.

Objective: To determine the impact of short IPI on pregnancy outcome in Nigeria.

Methodology: This was a longitudinal study of 271 eligible pregnant women receiving antenatal care in a tertiary hospital in Nigeria. For every consecutive pregnant woman with short IPI (< 18 months) recruited into the study; a suitable control (matched for age, parity and social class) with IPI \geq 18 months was recruited. Data collected included the socio-demographic data, IPI, current pregnancy history, gestational age, and any adverse pregnancy or perinatal outcomes. Hypotheses were tested using logistic regression analysis where applicable. All tests were two sided, and statistical significance was considered to be at probability value of < 0.05 .

Results: The mean age of the participants was 31.6 ± 4.2 years, and the mean neonatal birth weight was 3.3 ± 0.6 kg. The prevalence of maternal anaemia was significantly higher in women with short IPI than in control group (OR: 3.0; 95% CI: 1.76 – 5.09; $P < 0.001$). Other maternal and perinatal outcome measures including poor maternal weight gain, premature rupture of membranes, preterm labor, pregnancy induced hypertension, third trimester bleeding, primary postpartum haemorrhage, preterm birth, stillbirth, birth asphyxia, and low birth weight had no significant association with short IPI ($P > 0.05$).

Conclusion: Short IPI is associated with anaemia in pregnancy in Nigeria. However, further researches with larger sample sizes and preferably randomized controlled trials are needed to provide sound evidence on the impact of short IPI on maternal outcome in low income countries.