

ABSTRACT

Introduction: Low Birth Weight which is birth weight of less than 2500g remains a significant public health problem from short to long term consequences. It is responsible for significant neonatal morbidities, mortalities and disability in infancy and childhood which is associated with long term impact on health outcomes in later life

General Objective: The general objective of this study was to determine the factors influencing low birth weight among postpartum mothers in Bentiu State Hospital.

Methodology: The study used facility based cross sectional study design that involved 285 postpartum mothers and 285 newborns in Bentiu Hospital, South Sudan. Sample size was determined using Kish Leslie's formula of 1965. Purposive sampling technique was used to sample postpartum mothers at birth. Key Informants (10) were purposively selected from the hospital and data was collected using semi-structured questionnaire and key informant interview guide (KIIG). Data was entered into Epi-Info v3.3.1 and exported to SPSS version 20 for statistical analysis at 95% confidence interval. Chi-square test and Fisher's exact test were used to analyze the relationship between independent and dependent variables. Statistically significant variables with probability values less than 0.05 were re-analyzed at multi variable logistic regression into odds ratios with subsequent 95% confidence intervals. Meanwhile, qualitative data were organized in ATLAS Ti and content analyzed into themes to aid triangulation.

Results: There were 285 mothers studied with mean age of 25 years, most mothers were aged between 20-24 and 25-29, 84(29.5% and 83(29.1%) respectively. Majority 219(76.8%) were married. LBW prevalence of 23.5% (67) [N=285, 95% CI: 0.187-0.287] while the majority 218(76.5%) of the postpartum mothers had normal weight babies.

In Multi variable logistic regression, mothers aged 25-29 (AOR=7.17, 95%CI: 1.176-43.765, p=0.033), those aged 30-34 (AOR=10.73, 95%CI: 1.629-70.743, p=0.014) and those ≥ 35 years (AOR=4.34 95%CI: 0.622-30.292, p=0.138) were significantly associated with LBW. Business women (AOR=0.19 95%CI: 0.055-0.682, p=0.011) and those in salaried employment (AOR=0.19 95%CI: 0.039-0.921, p=0.039) were less likely to have LBW babies. Low social support was significantly associated with LBW (AOR=3.65 95%CI: 1.77-7.525, p<0.001).
xii Surprisingly, mothers with >4 ANC attendance were 68.99 times more likely to produce LBW compared to those with less than four visits (AOR=68.99 95%CI: 1.021-4661.183, p=0.049). Mothers with no pregnancy complication experience were less likely to bear LBW was (AOR=0.42 95%CI: 0.181-0.994, p=0.048). Mothers who did not take folic acid (AOR=4.82, 95%CI: 2.233-10.392 p<0.001) and antibiotics (AOR=8.74 95%CI: 3.597-21.248 p<0.001) during pregnancy were 4.82 and 8.74 times more likely to give birth to LBW babies compared to those who were given and consumed it.

Conclusion: Low Birth Weight was high at 23.5%, late reproduction, low social support, pregnancy complications, lack of social support, not taking folic acid and antibiotics increased prevalence of LBW. Reproducing at right age, providing social support, preventing pregnancy complications, ensuring access and intake of folic acid and antibiotics during ANC at health facility and during community outreaches can have valuable influence on pregnancy outcome.