Examining the effects of excess weight gain among pregnant women could help identify weight gain limits during pregnancy. The Institute of Medicine (IOM) developed guidelines for weight gain during pregnancy. This study evaluated delivery outcomes when weight is gained above these guidelines and if these guidelines are applicable in Cameroon. The study was a cross sectional analytic study which involved 220 women with singleton term pregnancies. They were grouped into two groups, normal (110 women) and excess (110 women) weight gain groups, with respect to their prepregnancy BMI. The normal group was defined as; women with BMI < 18.5 kg/m² and gained 12.5-18kg, those with BMI of 18.5–24.9kg/m² gained 11.5-16kg, BMI 25.0–29.9kg/m² gained 7-11.5kg and women with BMI> 30kg/m² gained 5-9kg. Those who gained weight above these ranges were the abnormal group or exposed group. The outcomes of delivery were recorded in a predesigned and pretested questionnaire.

Almost half of the women were overweight or obese before pregnancy. Close to half had normal BMI. Weight gain decreased with increase in Body Mass Index. Primiparous women gained weight above the recommended guidelines while multiparous women gained weight within guidelines. Women whose weight gain during pregnancy was out of the recommended ranges had an increased risk of adverse obstetric and neonatal outcome. This also suggests that the Institute of Medicine weight gain guidelines can be applicable to the Cameroonian population.