

The aim of this study was to describe the pattern of weight gain in pregnancy among Jamaican women, and to relate this and other maternal variables to infant birth weight.

A retrospective study of records was undertaken, using two available sources: University Hospital of the West Indies (UHWI) obstetrical records and records of a longitudinal study conducted in Lawrence Tavern, St. Andrew. Hospital records of 653 patients were abstracted and 87 pregnancies of Lawrence Tavern women were included for study.

The mean birth weight of UHWI infants was 3160 g; 7.8% were low birth weight. Birth weights were not available for Lawrence Tavern infants.

The mean weight gain of the University Hospital of the West Indies and Lawrence Tavern gravidae was calculated to be 10.7 kg and 8.5 kg, respectively, for the whole of pregnancy, or 9.6 kg and 8.6 kg, respectively, for 13 weeks to term. This is less than maternal weight gain reported in European countries and greater than weight gain reported in India and Gambia.

Weight gain was positively correlated with birth weight. The incidence of birth weights $<2,600$ g was more than twice as high among mothers gaining ≤ 10 kg as compared to those gaining >10 kg in pregnancy.

Maternal weight at 13 weeks was found to be more significant in relation to birth weight than weight gain. Maternal weight for height, height and age were also significantly associated with birth weight.

Maternal weight for height and pre-pregnancy (or 13-week) weight were found to be significant determinants of weight gain in pregnancy.