Gestational diabetes mellitus (GDM), an obstetric disease that affects the health of pregnant women, is one of the key factors associated with perinatal mortality or disease. The purpose of this study was to explore the impact of pre-pregnancy body mass index (BMI) and gestational weight gain (GWG) on perinatal outcomes for women with GDM. With a retrospective study design, women who received prenatal checkups and gave birth at the two hospitals were participants. Researcher used a retrospective case-study method to identify women who received a GDM diagnosis between 1995 and 2011. The results showed that women with GDM and with an overweight pre-pregnancy BMI were more likely to have cesarean deliveries and to use diabetes medications after delivery. Their newborns also had a higher birth weight. In addition, gestational hypertension and cesarean delivery were more common in women with GDM and with excessive GWG than in women with GDM and with normal GWG. The newborns of women with GDM and with excessive GWG had higher birth weights and more nuchal cord than those of women with GDM and with normal GWG. More women with GDM and with an excessive GWG underwent blood glucose monitoring than did women with GDM and with a normal GWG. Women with GDM, the pre-pregnancy weight and GWG significantly affected perinatal outcomes in both the women themselves and their newborns. Health care providers should emphasize the impact of pre-pregnancy BMI and GWG on the perinatal health of women with GDM.

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The impact of pre-pregnancy body mass index and gestational weight gain on perinatal outcomes for women with gestational diabetes mellitus

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