

The effects of body mass index on pregnancy outcomes in the rural areas of north of Iran

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Abstract

The effect of maternal body mass index (BMI) on the risk of maternal and neonatal outcomes were examined on a singleton term pregnancies of rural areas of Amol in North of Iran. In this study maternal height, maternal age, maternal weight in early pregnancy or in first trimester (or in first visit) were measured. The women were classified in 3 classes of BMI. We calculated the adjusted odds ratio to estimate the risk for the maternal outcomes such as, post-term delivery, pre-term delivery, rate of unplanned emergency caesarean, 3rd-or 4th-degree lacerations, postpartum infection, transfusion requirement, and more than 3 days hospitalization. Neonatal outcomes were considered intrauterine growth retardation, birth weight, neonatal morbidity, neonatal death, stillbirth, and low Apgar score (< 7 at 5 min). We performed recent method of instrumental variable (IV) estimator to obtain consistent estimate of the effect of BMI on considered outcomes in the presence of unmeasured confounder factors.

Keywords

Body mass index, Instrumental variable, Maternal outcomes, Neonatal outcomes, Overweight, Obesity.

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