Risk of adverse outcomes by pre-pregnancy Body Mass Index among Italian population: a retrospective population-based cohort study on 27,807 deliveries

The prevalence of obesity has been growing worldwide, including among pregnant women and women of reproductive age. While Italy has among the lowest prevalence of adult obesity, the proportion of women of reproductive age with obesity is reported to be 18%. Multiple studies highlighted that maternal pre-pregnancy weight has consequences both for the mother and the foetus. Consequently, the aim of this study was “to examine pregnancy outcomes in obese and overweight North-Italian women, and evaluate the adjusted risk of adverse maternal and neonatal outcomes as a function of increasing pre-pregnancy Body Mass Index.”

The study was conducted as a retrospective population-based cohort study and included a total of 27,807 deliveries. Of these, 75.8% of pregnancies occurred in normal weight women, 16.7% in women with overweight and 7.5% in women with obesity. The study highlighted an association between pre-pregnancy obesity and “overall severe maternal mortality and antepartum severe maternal morbidity.” The authors therefore concluded that obesity seems to be associated with an increased risk of antepartum, but not intra or post-partum severe maternal morbidity. To this date, this seems to be the “first report in a sample of Italian population regarding the association between pre-pregnancy BMI and the risk of several negative obstetric outcomes.”