

17th World Congress of the Academy of Human Reproduction

15–18 March 2017
Rome, Italy

TITLE

MATERNAL AND PERINATAL OUTCOMES IN WOMEN WITH DIABETES IN THE LATVIAN POPULATION 2011-2015

AUTHOR/S

Zile I (LV) [1], Strele I (LV) [2], Villerusa A (LV) [3], Gavare I (LV) [4]

ABSTRACT

Introduction. The prevalence of diabetes mellitus (DM) is increasing worldwide. Pregnancies with DM (including gestational diabetes (GDM)) is an important public health problem. **Objective.** To evaluate the maternal and perinatal outcomes of women with DM and without DM.

Materials and methods. Data source: population-based Medical Birth Register, 2011 - 2015. All deliveries with Type 1 diabetes (T1DM) (n=162), type 2 (T2DM) (n=43) and GDM (n=1537) were included. As control group were used all deliveries without DM (n=98824). Adjusted Odds ratios (OR) (for maternal age and parity) were estimated. Outcome measures were preeclampsia; mode of delivery; premature delivery; macrosomia (>4500g); Apgar score at 1st and 5th minutes (<6); stillbirth; congenital anomalies.

Results. T1DM was 0.2%; T2DM 0.04%; GDM 1.5%. Women with T1DM had higher odds of all outcome measures: preeclampsia (OR=5.8; 95%CI 3.5-9.6), caesarean sections (OR=11.2; 95%CI 7.8-16.1), preterm birth (OR=6.9; 95%CI 4.9-9.8), macrosomia (OR=4.8; 95%CI 2.9-7.9), Apgar score <6 at 1 min (OR=3.4; 95%CI 2.2-5.2) and 5 min (OR=3.9; 95%CI 1.9-7.9), stillbirth (OR=5.1; 95%CI 1.9-13.7) and congenital anomalies (OR=3.0; 95%CI 1.7-5.2) than without DM. Women with T2DM had higher odds of 4 measures: preeclampsia (OR=7.0; 95%CI 2.7-17.7), caesarean sections (OR=2.8; 95%CI 1.5-5.0), preterm birth (OR=3.5; 95%CI 1.6-7.5), Apgar score <6 at 1 min (OR=3.2; 95%CI 1.3-7.5). GDM deliveries had greater risk also of 4 measures: preeclampsia (OR=2.8; 95%CI 2.2-3.5), caesarean sections (OR=1.6; 95%CI 1.4-1.8), preterm birth (OR=1.3; 95%CI 1.2-1.6) and macrosomia (OR=3.5; 95%CI 2.9-4.1).

Conclusions. Diabetes during pregnancy is associated with higher risk of adverse maternal and perinatal outcomes. Therefore, early screening, detection, close monitoring, and intervention is essential to reduce maternal and fetal complications.

INSTITUTE

[1] The Centre for Disease Prevention and Control of Latvia, [2] Riga Stradin's University, Public Health and Epidemiology Department, [3] Riga Stradin's University, Public Health and Epidemiology Department, [4] The Centre for Disease Prevention and Control of Latvia