The frequency of occurrence of GDM in pregnant women of the Uzbek population in the Fergana Valley of Uzbekistan

WORLD **DIABETES**
FOUNDATION

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Background

The prevalence of GDM varies in different countries from 1–18%. To date, Uzbekistan has no data on the prevalence of GDM, despite the high birth rate (more than 700,000 newborns per year).

Aims

For the first time in Uzbekistan, the goal is to study the incidence of GDM and prevailing risk factors in pregnant women of the Uzbek population in the Fergana Valley, by screening among pregnant women

Method

In the framework of the implementation of the 3-year (2017-2020) international project “Strategy for the Prevention and Monitoring of GDM in Uzbekistan” received from the WDF Charitable Organization for Diabetes Patients UMID. In the Fergana Valley (Namangan and Andijan regions, where the highest birth rate is observed in the Republic), GDM was screened for the first time among 757 pregnant women 16-30 weeks old, aged 18-40 years. The screening included: anamnesis (presence of risk factors, number of births, etc.); anthropometry (height, weight, BMI); examination of specialists (endocrinologist, gynecologist, cardiologist); Fetal ultrasound and ECG; study of the level of glucose in the venous blood on an empty stomach and 60 minutes after OGTT (75 g of glucose). The results were interpreted according to the recommendations of ADA (2015).

Results

The results of screening among 757 pregnant women (16-30 weeks) in the Fergana Valley revealed that the frequency of occurrence of GDM in pregnant women in the Uzbek population was 10.5%, Reliable hyperglycemia on an empty stomach (in venous blood) was observed in 46.3% of pregnant women (6.3 ± 0.4 mmol / l, $p \leq 0.05$), over the age of 30 years. According to the results of OGTT (75 g of glucose), after 60 min, a significantly high level of glucose was observed in 53.7% of pregnant women (10.9 ± 0.8 mmol/l, $p \leq 0.01$).

In pregnant women of the Uzbek population, the following risk factors for the development of GDM were identified: age - over 33 years in 45%; macrosomia in history (> 4 kg) in 38.7%; Family history of Type 2 diabetes in 35%; overweight in 32.5% of patients; grade 1 obesity - in 32.5%, grade 2 obesity in 20%, grade 3 obesity in 5%; weight gain during pregnancy more than 15-20 kg in 28.7%; miscarriages (1-3 times) in the anamnesis in 21.2%; arterial hypertension (pre-eclampsia) in 21.2%, stillbirth / non-developing pregnancy in the anamnesis in 15%.

Discussion

For the first time in Uzbekistan, the frequency of occurrence of GDM among pregnant women of the Uzbek population in the Fergana Valley was detected, which was 10.5%.

The prevailing risk factors for developing GDM in pregnant women of the Uzbek population were: age over 33 years, 45%; macrosomia in history from 38.7%; Family history of Type 2 diabetes in 35%; overweight in 32.5%.