

THE EFFECT OF OBESITY ON THE COURSE OF PREGNANCY IN GESTATIONAL DIABETES MELLITUS

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INTRODUCTION

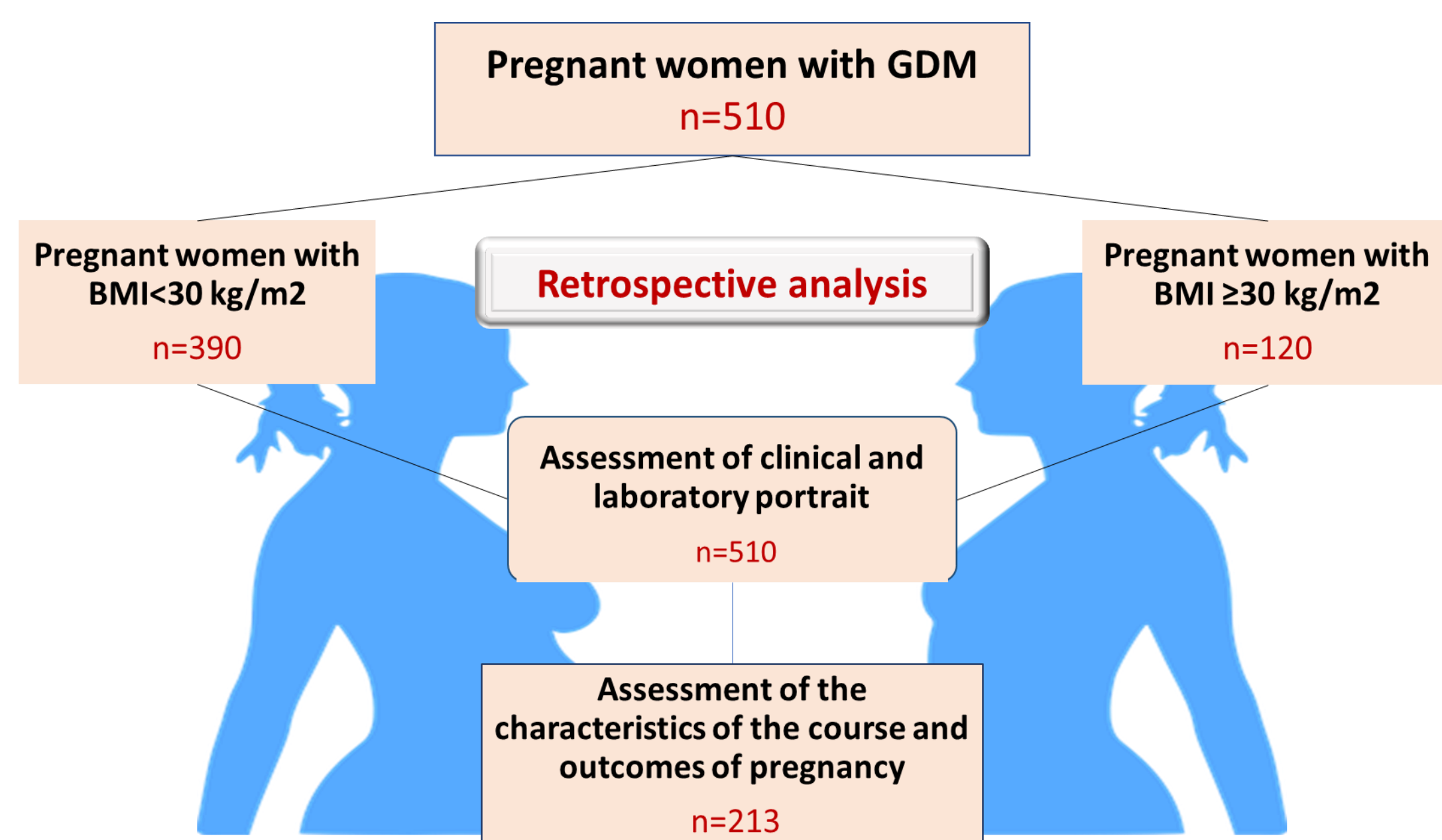
Gestational diabetes mellitus is a common condition that complicates pregnancy. Obesity is recognized as an unfavorable background for pregnancy and a risk factor for adverse outcomes for the mother and fetus. Supposed

the contribution of maternal obesity to the structure of perinatal and obstetric complications in gestational diabetes mellitus

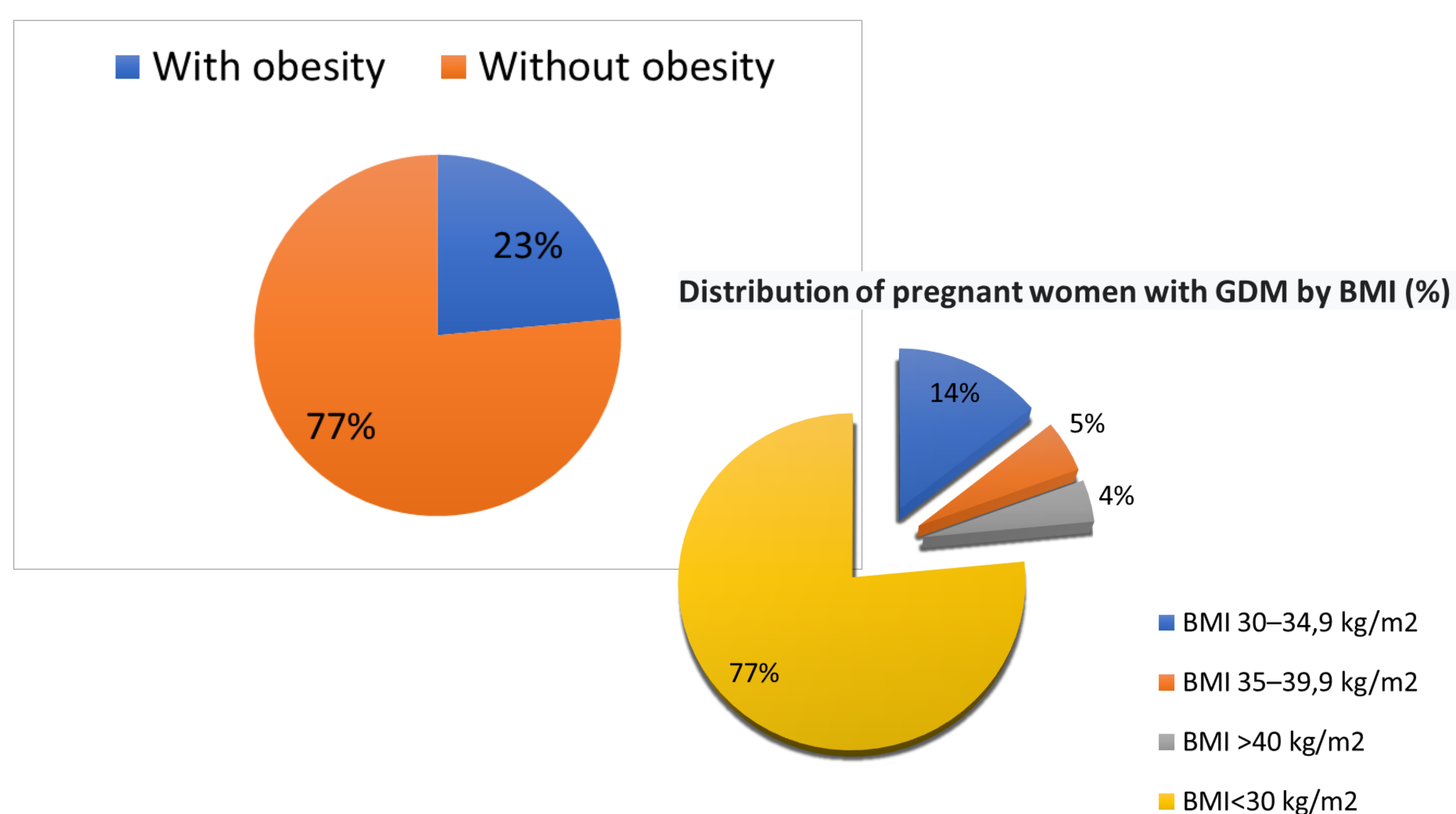
The aim: To evaluate the effect of obesity on the course and outcomes of pregnancy in gestational diabetes mellitus.

MATERIALS AND METHODS

Study design

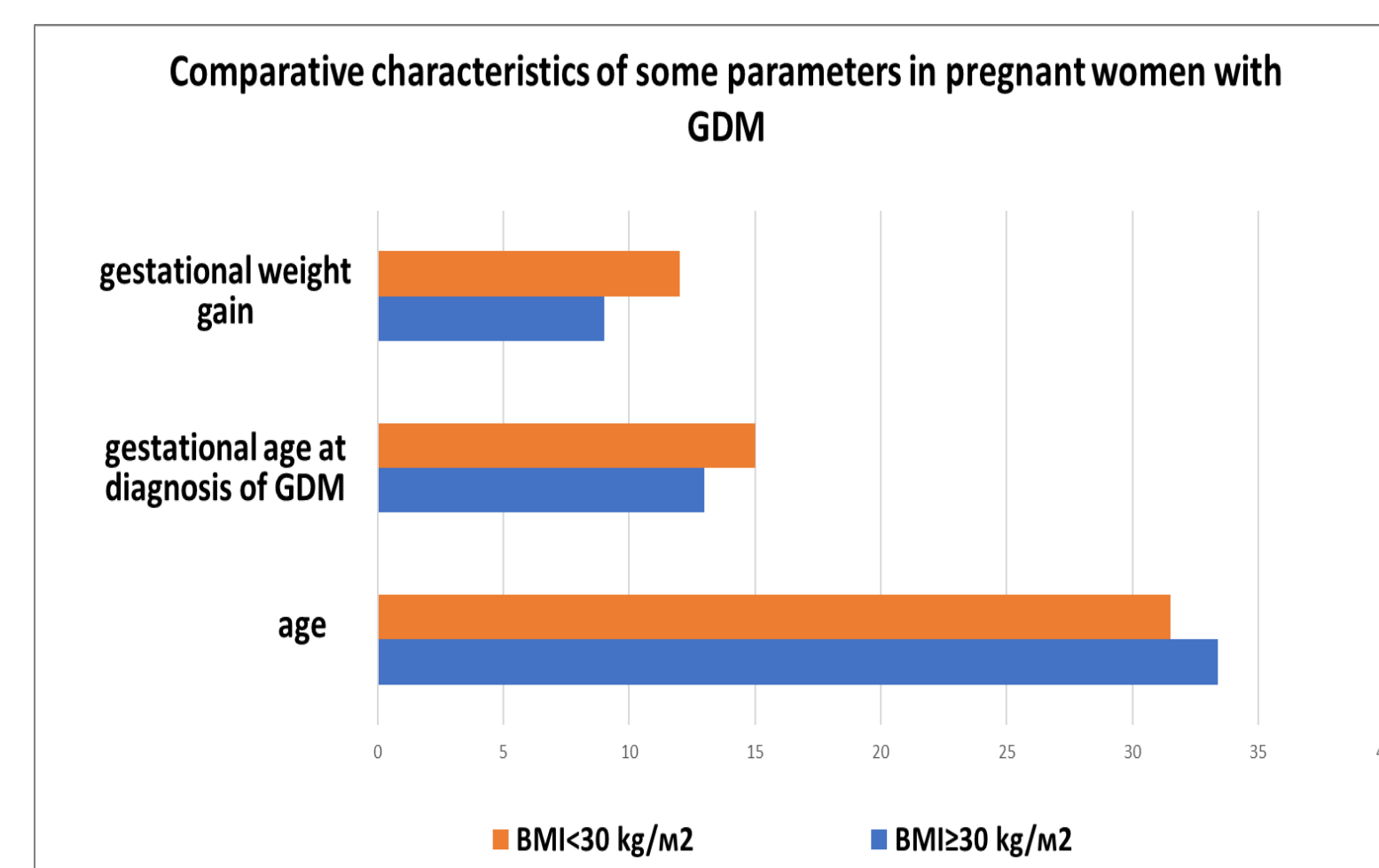


Retrospective analysis of medical documentation (outpatient records of pregnant women, birth histories, newborn development histories) of 510 pregnant women with gestational diabetes mellitus (GSD). 2 groups were formed depending on the BMI at the time of registration in the women's consultation (1 trimester of pregnancy): group 1 – pregnant women with GSD with a BMI ≥ 30 kg/m² (n=120), group 2 – pregnant women with GSD with a BMI < 30 kg/m² (n=390). A comparative analysis of laboratory data, ongoing therapy, and complications in groups was performed. Statistical data processing was performed using the statistical software package "Excel" ("Microsoft"), the program "Statistica 10" ("Statsoft Inc").



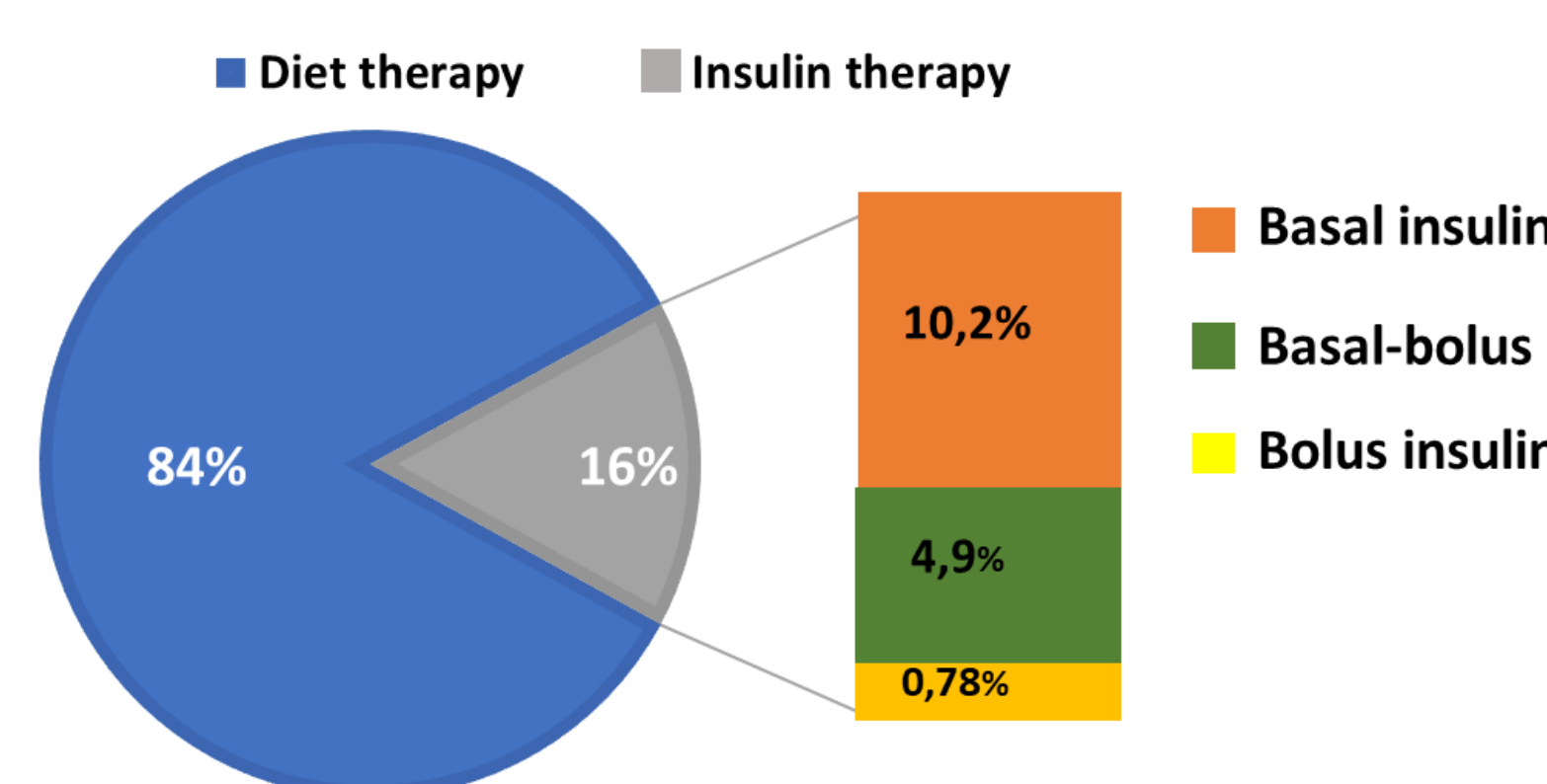
RESULTS

Pregnant women with a BMI ≥ 30 kg/m² had higher blood glucose levels at the onset of disease 2 (5.7 ± 0.4 vs 5.5 ± 0.36, p=0.0002) and glycated hemoglobin (5.3 ± 0.4 vs 5.2 ± 0.4, p=0.004) compared with women without obesity. Gestational weight gain was lower in group 1 compared to group 2 of 30 kg/m² (10.1 ± 4.9 vs 12.2 ± 4.6, p=0.005), which is probably due to stricter compliance with dietary recommendations. Pregnant women with GSD over the age of 35 were significantly more likely to be obese compared to other age groups (38.7%, coefficient. Kramer's V 0.2, p=0.003).



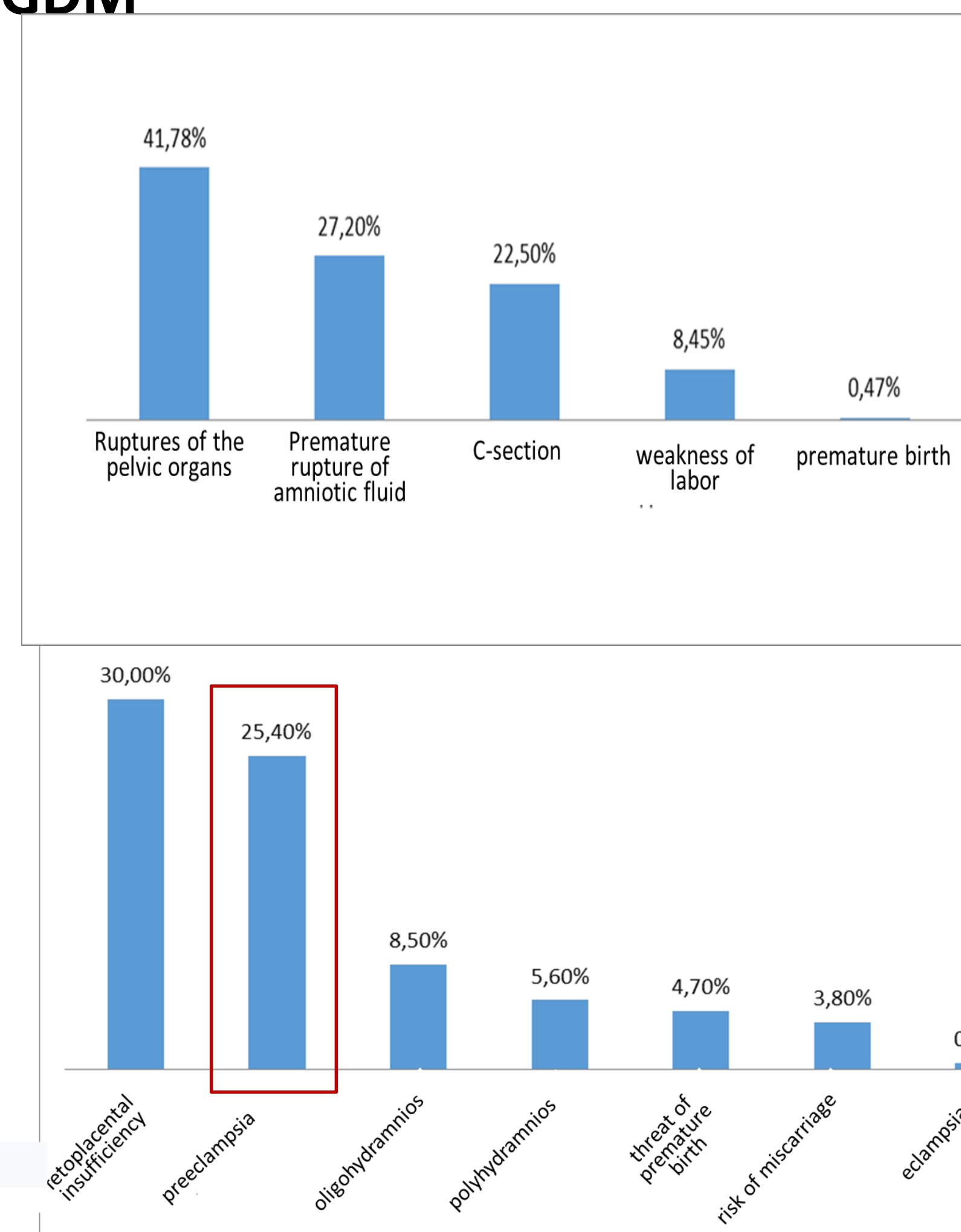
	BMI ≥ 30 kg/m ²	BMI < 30 kg/m ²	P-value
Age, year	33,4 ± 4,43 (95% ДИ 32,6-34,2)	31,5 ± 4,47 (95% ДИ 31,0-32,0)	< 0,001
Ggestational age at diagnosis of GDM, weeks	13,0 [10,0; 23,0]	15,0 [10,0; 25,0]	0,102
Gestational weight gain, kg	9 [6,0; 13,0]	12 [9,0; 15,0]	0,002

The need for insulin therapy in women with GDM



	Obesity	
Insulin therapy	OR (95% CI)	1,97 (1,25; 3,1)
	P-value	0,01

The influence of obesity on the course and outcomes of pregnancy in GDM



CONCLUSIONS

Pregnant women with GSD who were obese at the time of pregnancy were characterized by higher baseline glycemia, a twofold increase in the need for insulin therapy, as well as a higher risk of developing preeclampsia and the total risk of adverse outcomes of GSD compared with pregnant women suffering from GSD, but not obese.