According to data from five full regional diabetes registers, prevalence of type 2 diabetes (T2D) in Ukraine among persons over 39 years of age is higher for women. The two regions (cluster 1) joined the USSR after 1939 and their population was not exposed to the famine that occurred in the middle of 1930s and which was significant in other three regions (cluster 2). Height and Body Mass Index (BMI) were assessed according to individual patient data (n=94 660). Wilcoxon test was used to compare height (cm) and BMI (kg/m²) values in patients, born from 1925 to 1955 in cluster 1 (n=16 550) and cluster 2 (n=46 855). In cluster 2, the height for women was lower than in cluster 1: 162.57 (162.31–162.42) and 165.15 (165.04–165.23) cm respectively, mean (95 CI), p<0.001, whereas BMI was higher: 29.13 (29.09 to 29.17) and 28.64 (28.57 to 28.71) kg/m², p<0.001. Height for men did not differ: 171.75 (171.66 to 171.84) and 171.53 (171.17 to 171.95) cm in cluster 2 and 1, BMI was higher: 27.83 (27.77 to 27.85) and 27.64 (27.56 to 27.72) kg/m² in cluster 2 and 1 respectively, p=0.007. However, out of 51 yearly birth groups (YBGs) this was true for 25 YBGs in females and only for 4 YBGs in males. Height and BMI variations in T2D populations affect mainly women. The reason for differences between clusters could be the result of the genotype selection due to better survival of overweight persons under the condition of starvation. “Thrifty genotype” contamination can be one of the reasons of higher T2D prevalence in Ukrainian women population.

Introduction Elevated blood pressure may lead to incident diabetes. Yet, data about the effect of different blood pressure components on incident diabetes in Middle Eastern women is lacking.

Methods We evaluated systolic blood pressure (SBP), diastolic blood pressure (DBP), pulse pressure (PP) and mean arterial pressure (MAP) as independent predictors of diabetes in Iranian women. We performed a population-based prospective study among 3028 non-diabetic women, aged 20 years. ORs of diabetes were calculated for every 1 SD increase in SBP, DBP, PP and MAP.

Results During 20 years of follow-up, 220 women developed diabetes. There were significant interactions between family history of diabetes and diabetes; in multivariable model, they were not independent predictors of diabetes.

Conclusion In women without family history of diabetes, SBP, PP and MAP were independent predictors of diabetes with almost similar predictive ability; hence in the evaluation of the risk of blood pressure components for prediction of diabetes, the presence of family history of diabetes should be considered.