

Poster session 2

P2-135 ANTROPOMETRIC COMPARISONS IN TYPE 2 DIABETES PATIENTS, RELATED TO POPULATIONS WITH DIFFERENT SOCIAL EXPERIENCE

doi:10.1136/jech.2011.142976i.70

¹M Khalangot,* ²E Strele. ¹V.P.Komisarenko Institute of Endocrinology and Metabolism, National Academy of Med Sci, Kiev, Ukraine; ²Department of Epidemiology, Riga Stradiņš University, Riga, Latvia

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=94 460). Wilcoxon test was used to compare height (cm) and BMI (kg/m^2) values in patients, born from 1925 to 1955 in cluster 1 (n=16 550) and cluster 2 (n=46 853). In cluster 2, the height for women was lower than in cluster 1: 162.37 (162.31–162.42) and 163.13 (163.04–163.23) 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/m^2 , p<0.001. Height for men did not differ: 171.75 (171.66 to 171.84) and 171.83 (171.7 to 171.95) cm in cluster 2 and 1, BMI was higher: 27.83 (27.77 to 27.88) and 27.64 (27.56 to 27.72) kg/m^2 in cluster 2 and 1 respectively, p=0.007. However, out of 31 yearly birth groups (YBGs) this was true for 23 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.

P2-136 FAMILY HISTORY OF DIABETES MODIFIES THE EFFECT OF BLOOD PRESSURE FOR INCIDENT DIABETES IN MIDDLE EASTERN WOMEN: TEHRAN LIPID AND GLUCOSE STUDY

doi:10.1136/jech.2011.142976i.71

¹M Hatami, ¹F Hadaegh, ^{1,2}D Khaiili,* ¹F Sheikholeslami, ¹F Azizi. ¹Prevention of Metabolic Disorders Research Center, Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran; ²Department of Epidemiology, School of public health, Shahid Beheshti University of Medical Sciences, Tehran, Iran

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 ≈ 6 years of follow-up, 220 women developed diabetes. There were significant interactions between family history of diabetes and SBP, PP and MAP ($p \leq 0.01$) in predicting incident diabetes. In women without a family history of diabetes, all blood pressure components were significantly associated with diabetes in the age adjusted model; the risk-factor-adjusted ORs were significant ($p < 0.05$) for SBP, PP and MAP (1.30, 1.34 and 1.27, respectively) with similar predictive ability (area under receiver operator characteristic curve $\approx 83\%$). In women with family history of diabetes, in the age adjusted model, SBP, DBP and MAP were associated with

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.

P2-137 THE ASSOCIATION BETWEEN QUALITY OF PRIMARY CARE, DEPRIVATION AND CORONARY HEART DISEASE OUTCOMES

doi:10.1136/jech.2011.142976i.72

R Khan,* R Maclean, D Lemon. NHS Dorset, Dorchester, UK

The Quality and Outcomes Framework (QOF) is a financial incentive scheme for general practitioners in the UK. It was introduced in 2004 with the aim of improving the quality of primary care and reducing health inequalities in primary care delivery. There is relatively little evidence to support the hypothesis that practices with higher quality of care measured by the QOF score have better health outcomes. However some studies have shown that higher QOF scores are associated with lower admission (Bottle *et al.* 2008b; Kiran *et al.* 2010). In both studies the association was stronger in practices with higher deprivation/lower socioeconomic distribution. The aim of this study is to assess whether high quality primary care, measured using quality of care measures, is associated with lower coronary heart disease morbidity and mortality in an area of relatively low deprivation. This is an ecological study using data from four years before and four years after the introduction of QOF. The study will compare these time periods for any change in CHD admissions and mortality. The study will also assess whether there is an association between quality of care measures on specific coronary heart disease and associated hospital admission rates and mortality rates. The study will also assess whether any association is affected by the practice based deprivation score. Results of this study will be presented at the conference.

P2-138 PARENTAL INFLUENCES ON CARDIOVASCULAR RISK-FACTORS IN SWEDISH CHILDREN

doi:10.1136/jech.2011.142976i.73

¹A Khanolkar,* ¹I Koupil, ²L Byberg. ¹Centre for Health Equity Studies (CHESS), Karolinska Institutet/Stockholm University, Stockholm, Sweden; ²Uppsala Clinical Research Center and Department of Surgical Sciences, Section of Orthopaedics, Uppsala University, Uppsala, Sweden

Background Precursors of cardiovascular diseases (CVD) originate in childhood. We investigated the relationship of children's CVD risk-factors with parent's socioeconomic position (SEP) and lifestyle. We also studied how CVD risk-factors correlate within families.

Methods We studied 602 families (2141 individuals) comprising two full sibs; aged 5–14 years, and their biological parents (Uppsala Family Study). Parental SEP measured as occupational class and education, and lifestyle habits (smoking, physical activity, alcohol consumption) were obtained from questionnaires. Associations with cholesterol, apolipoproteins (ApoB/ApoA1), adiponectin, blood pressure, body mass index and overweight/obesity were analysed by linear and logistic regression. Results are adjusted for children's age, gender, pubertal stage and family clustering.

Results In addition to differences in children's CVD risk factors by parental SEP, we observed specific associations between parental lifestyle and children's risk-factors that were independent of parental social characteristics. Children of non smoking parents had