**P2-125** INCIDENCE OF TYPE 2 DIABETES BY HbA1c AND OGTT: THE ISFAHAN DIABETES PREVENTION STUDY

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**Aims** The aim of this study was to estimate the incidence of type 2 diabetes using newly proposed haemoglobin A1C (HbA1c) and current oral glucose tolerance test (OGTT) definition in an Iranian non-diabetic population.

**Methods** A total of 925 non-diabetic first-degree relatives of patients with type 2 diabetes 20–70 years old in 2003–2005 were followed through 2009 for the occurrence of type 2 diabetes. At baseline and through follow-ups, participants underwent a standard 75 g 2-h OGTT and HbA1c measurements. Prediction of progression to type 2 diabetes by OGTT-defined or HbA1c-defined was assessed with area under the receiver-operator-characteristic curves based upon measurement of fasting plasma glucose, 2-h post-load glucose values and HbA1c.

**Results** The prevalence of type 2 diabetes was 9.2% (95% CI 8.2 to 10.2) by OGTT-defined diabetes and 7.9% (95% CI 6.9 to 9.0) by HbA1c ≥6.5. The incidence of type 2 diabetes was 2.0% (95% CI 1.6 to 2.4) (1.8% men and 2.1% women) per year by the current OGTT definition, whereas the incidence rates were 1.7% (95% CI 1.3 to 2.0) (1.6% men and 1.7% women) per year by HbA1c ≥6.5. Of those diagnosed with type 2 diabetes by OGTT, 69.6% had HbA1c<6.5% and therefore would not have been classified as having type 2 diabetes.

**Conclusions** The incidence and prevalence of diabetes using newly proposed HbA1c threshold in this first-degree relatives of patients with type 2 diabetes was slightly lower than using current OGTT definition.

**P2-126** WEIGHT CHANGE AND BLOOD PRESSURE, LIPIDS AND GLYCAEMIC CONTROL AMONG PATIENTS WITH TYPE 2 DIABETES

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**Objective** Although weight loss in patients with type 2 diabetes is very important, the data on the effect of long-term weight change on blood pressure (BP), lipids and glycaemic control among patients with type 2 diabetes receiving routine care are limited. The aim of this study was to assess the long-term impact of weight change on BP, plasma lipids and glycaemic control among patients with type 2 diabetes receiving routine care.

**Methods** During the mean (SD) follow-up period of 9.2 (3.4) (range 2–15) years, 7712 patients with type 2 diabetes have been examined to determine changes in weight, BP, plasma lipids and glycaemic control using a linear mixed effects model for repeated measures. The mean (SD) age of participants was 51.3 (10.5) years with a mean (SD) duration of diabetes of 6.3 (6.5) years at initial registration.

**Results** The change in fasting plasma glucose and glycosylated haemoglobin (HbA1c) from baseline to last follow-up examination was significantly more favourable in those who gained weight during follow-up than those who lost weight or stable weight. Systolic and diastolic BP and lipids also raised significantly more in the group with weight gain.

**Conclusions** Although this population of Iranian type 2 diabetes had negligible weight change over mean 9.2 years. Weight gain in patients with type 2 diabetes was associated with increase in BP and plasma lipids, but improvement in glycaemic control.

**P2-127** A CROSS SECTIONAL STUDY ON SEXUAL PRACTICES AND KNOWLEDGE RELATED TO SEXUAL HEALTH OF YOUTH IN THE REMOTE TEA PLANTATION SECTOR, SRI LANKA

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**Background** Issues related to sexual health among remote estate youth has gained a high priority in Sri Lanka. Sexual health knowledge, educational needs and risk taking behaviours in the selected sample.

**Methodology** A descriptive cross sectional survey using a self administered questionnaire and interviews of 400 remote tea estate workers, aged between 18 and 24 years was carried out.

**Results** The sample consisted of 188 males (47%) and 212 females (53%), with a mean age 20.23 years. A total of 362 (90.5%) were able to read and write. Peers were their main source of knowledge (53%), with a mean age 20.23 years. A total of 362 (90.5%) were able to read and write. Peers were their main source of knowledge (53%), with a mean age 20.23 years. A total of 362 (90.5%) were able to read and write. Peers were their main source of knowledge (53%), with a mean age 20.23 years. A total of 362 (90.5%) were able to read and write. Peers were their main source of knowledge (53%), with a mean age 20.23 years. A total of 362 (90.5%) were able to read and write. Peers were their main source of knowledge (53%), with a mean age 20.23 years. A total of 362 (90.5%) were able to read and write. Peers were their main source of knowledge (53%), with a mean age 20.23 years. A total of 362 (90.5%) were able to read and write. Peers were their main source of knowledge (53%), with a mean age 20.23 years. A total of 362 (90.5%) were able to read and write. Peers were their main source of knowledge (53%), with a mean age 20.23 years. A total of 362 (90.5%) were able to read and write. Peers were their main source of knowledge (53%), with a mean age 20.23 years. A total of 362 (90.5%) were able to read and write. Peers were their main source of knowledge (53%), with a mean age 20.23 years. A total of 362 (90.5%) were able to read and write. Peers were their main source of knowledge (53%), with a mean age 20.23 years. A total of 362 (90.5%) were able to read and write. Peers were their main source of knowledge (53%), with a mean age 20.23 years.

**Conclusion** Sexual health services are not sufficient to meet the needs of youth in the plantations and available services are not being delivered appropriately. A comprehensive, integrated sexual health service is needed for the youth and adolescents in the estate sector.