

**Results** Mean follow-up duration was 10.7 years. Cut-off levels of Lp(a) for tertiles were 10 mg/dl and 23 mg/dl. Risks for all stroke were 1.34 (95% CI 1.03 to 1.74) and 1.00 (95% CI 0.77 to 1.31) in the lower and the higher Lp(a) group, respectively, with reference to the middle group after adjustment for age, smoking status, drinking status, systolic blood pressure, and body mass index. Risks for cerebral haemorrhage (lower tertile 2.25, 95% CI 1.28 to 3.94 and higher tertile 0.93, 95% CI 0.49 to 1.77), were similar to all stroke and no significant relationships were seen between Lp(a) and cerebral infarction (lower tertile 1.15, 95% CI 0.83 to 1.60 and higher tertile 1.02, 95% CI 0.74 to 1.41), or subarachnoid haemorrhage (lower tertile 1.04, 95% CI 0.52 to 2.09 and higher tertile 0.96, 95% CI 0.48 to 1.90).

**Conclusion** Lower Lp(a) was an independent risk factor for stroke, especially, for cerebral haemorrhage in the general population.

**P2-125** **INCIDENCE OF TYPE 2 DIABETES BY HBA<sub>1c</sub> 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 A<sub>1c</sub> (HbA<sub>1c</sub>) and current oral glucose tolerance test (OGTT) definition in an Iranian non-diabetic population.

**Methods** A total of 923 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 HbA<sub>1c</sub> measurements. Prediction of progression to type 2 diabetes by OGTT-defined or HbA<sub>1c</sub>-defined was assessed with area under the receiver-operating characteristic curves based upon measurement of fasting plasma glucose, 2-h post-load glucose values and HbA<sub>1c</sub>.

**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 HbA<sub>1c</sub>  $\geq$ 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 HbA<sub>1c</sub>  $\geq$ 6.5. Of those diagnosed with type 2 diabetes by OGTT, 69.6% had HbA<sub>1c</sub> <6.5% and therefore would not have been classified as having type 2 diabetes.

**Conclusions** The incidence and prevalence of diabetes using newly proposed HbA<sub>1c</sub> 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 (6.3) years at initial registration.

**Results** The change in fasting plasma glucose and glycosylated haemoglobin (HbA<sub>1c</sub>) from baseline to last follow-up examination was significantly more favourable in those who gain 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.

**General objective** Describe the knowledge and practices related to sexual health of the youth in the tea plantation sector and conduct a pilot study on the sero - prevalence of common sexually transmitted diseases.

**Specific objectives** Explore the 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 (59%) and most reliable person to discuss sexuality ((55% with a 95% CI of 50% to 59%). The mean age of sexual debut for males was 12.56 (SD=1.88) and for females it was 16.21 years (SD=1.5). Eighty six percent of males had homosexual experience and 63% had more than one same sex partner. Their knowledge on STDs, HIV and available services were very low. None of the participants were test positive for HIV, Hepatitis B and Syphilis.

**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.

**P2-128** **DISTRIBUTION OF 10-YEAR AND LIFETIME PREDICTED RISK FOR CARDIOVASCULAR DISEASE IN THE INDIAN SENTINEL SURVEILLANCE STUDY POPULATION**

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