Results Mean follow-up duration was 10.7 years. Cut-off levels of Lp(a) were 10 mg/dl and 25 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 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.

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 (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.

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 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 HbA1c measurements. Prediction of progression to type 2 diabetes by OGTT-defined or HbA1c-defined was assessed with area under the receiver-operating characteristic curves based on 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.

Objective 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 description 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 77% never used condoms. Males were more likely to engage in unprotected sex (P=0.03). The sample mean age at first sexual intercourse was 17.6 years (SD=2.11). A total of 77% of males had more than one same sex partner. Their knowledge on STDs, HIV and Hepatitis was low. Eighty percent of the participants were 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.