Summary

This study was conducted to identify the various factors associated with poor control of type 2 diabetes mellitus and to derive a statistical model to predict poor control of diabetes.

This study identified seven factors, which were associated with poor control of diabetes: age (years), gender (male/female), BMI (Kg/M$^2$), waist circumference (Cm), smoking (yes/no), alcohol (yes/no) and exercise (no/yes). By using these factors a statistical model was derived to predict the probability of poor control of diabetes.

A calculator was developed to predict the probability of poor control of diabetes by using the derived model. It will be very useful to predict the probability of poor control of diabetes based on diabetic’s age (years), gender (male / female), BMI (Kg/M$^2$), waist circumference (Cm), smoking (yes / no), alcohol and exercise (yes / no). Once the information is entered, the probability of poor control will be calculated automatically.

This study also developed a database to store the Epidemiological information about diabetes. It includes demographics, lifestyle, disease history, treatments, compliance, complications, and follow up details.