

**Risk factors for long-term complications in type 2 diabetes in the Western Province of Sri Lanka**

The primary objective of this study was to identify and quantify risk factors for development of long-term complications of Diabetes Mellitus (DM) among type 2 diabetics in the Western province of Sri Lanka. A secondary objective was to determine whether complications are associated with each other.

This is an unmatched, clinic based, case-control study, where cases are diabetics having one or more complications of DM (Diabetes:Retinopathy, Nephropathy, Neuropathy and Macrovasculopathy), and controls are those who have no complications. The study

enrolled 252 cases and 288 controls from several teaching, base and district hospitals in the Western province.

Initially univariate (unadjusted) analysis were carried out. A Logistic regression (adjusted) analysis showed that several factors were related to the development of major diabetic complications. These are age, level of education, duration of treatment, level of random blood sugar (RBS) and body mass index. The joint effects of duration of diabetes and micro albuminuria, duration of diabetes and patient's satisfaction about the clinic service, micro albuminuria and frequency of blood sugar tests done at the clinic were also significantly associated with the development of long-term complication of DM.

Generalised Logit models were fitted to determine whether there was an inter-relationship between complications. Results showed a fairly high probability of getting diabetic neuropathy given that the patient has complication of DM. The development of diabetic retinopathy and nephropathy together is also observable among diabetics who have high amount diabetics is extremely rare.