

## Summary

Type 2 diabetes mellitus is a common health problem in Sri Lanka. The prevalence is increasing rapidly due to several reasons. Increase in life expectancy due to better health facilities resulting in an ageing population, must have increased the population at risk. Increasing urbanization leading to life style changes like sedentary occupations, increasing mechanization etc, sedentary past times like watching television, changes in diet to more refined food, are risk behaviours. In addition, more cases may be diagnosed due to better health education causing more awareness among general population and better opportunities for screening.

Diabetes is an illness causing lot of misery to the patient due to uncontrolled symptoms, metabolic and long-term complications. Evidence suggest that the disease and complications can be delayed or prevented and symptoms alleviated, by modifying risk factors and treatment. For this the patient should be knowledgeable about the disease, have correct attitudes and good practices. This study was done to assess knowledge, attitudes and practices regarding diabetes among diabetic patients and the association between these and the glycaemic control. Study was conducted in the Diabetic clinic of the Colombo South Teaching Hospital and the researcher's family practice in Kotte.

Patients Socio-demographic characteristics, their knowledge attitudes and practices regarding diabetes were surveyed using a structured questionnaire and the metabolic control assessed by testing fasting blood sugar. Results were entered into a computer and analyzed using SPSS version 10. Two hundred and eighteen patients were studied but 41 were left out due to incompleteness of data and the study population included 177.

Mean duration of diabetes of the study population was  $6.98 \pm 5.85$  years whilst mean age of the patients was  $57.99 \pm 10.5$  years. More than 90 % fell into age group 40 – 80 years. M: F ratio of the study sample was 1:1.8. Seventy percent of patients were living with their spouse and 98.8 % were living in their own accommodation. 97.2 % had their meals prepared in their residence. 95.5 % have had some form of formal education. There were more Sinhalese and Buddhists in the study sample (91% and 87% respectively) than in the general population. 35 % had a monthly family income less than Rupees 5,000 and a similar percentage had an income between Rupees 5000 to 10,000. Remainder had an income above Rupees 10,000.

Knowledge regarding diabetes was average or good in all patients (above 50 % in the knowledge score scale). 55.4% of patients could identify symptoms of hypoglycaemia. There was a statistically significant association between the knowledge about hypoglycaemic symptoms and the fasting blood sugar. (Chi square test  $p = 0.05$ )

95.5% of patients scored above 50% in the scale for attitudes. A similar percentage thought that it is important to control diabetes and that the patient's commitment is necessary. They also thought that diet and exercise are as important as medicines to control the disease. 88.7% of people thought that strict control of diabetes is necessary as the complications can be prevented or delayed. Some had wrong attitudes as well. 34.5% felt that diabetes curtail all activities. 14.1% of patients had the attitude that diabetes can be cured.

92 % scored more than 50% in the scale for good practices in relation to diabetes. 90% always took their medicines on time. 75 % were attending diabetic clinic / family practice regularly 50% always watched their dietary intake. 52.5 % never took sugar, but 18% took sugar often. 33.3 % never took sweets, whilst 5% took sweets often. There were areas for improvement. 61 % never inspected the feet, even if they had cleaned the feet before going to bed at night. 40.7 % never took adequate exercise. Only 33.3% took their meals on time, a lesser percentage (25.4%) checked their blood sugar regularly and only 9% weighed themselves regularly. The mean score for good practices in relation to diabetes was 16.74 on a scale of +40 to - 40.

In this study, the mean fasting blood sugar was  $129 \pm 36.4$  mg/dL. 33.3% of patients had fasting blood sugars less than 110mg/dL, which should be the goal. 30.5% of patients had fasting blood sugars between 110-130 mg/dL, which was satisfactory. 36.2% of patients had blood sugars above 130 mg %, which was poor.

Knowledge required to control diabetes was adequate in all patients but there was room for improvement. There was a statistically significant association ( $p = 0.05$ ) between the knowledge about hypoglycaemic symptoms and the fasting blood sugar in this study. Most of the patients had correct attitudes towards the illness. But about one third of them felt that diabetes curtail activities and that diabetes can be cured. Foot care practices were less than satisfactory in the majority. The glycaemic control and monitoring could have been better. There was an association of knowledge with attitudes and practices but not with glycaemic control.