

## 1. Abstract

Diabetes mellitus (DM) is a common group of metabolic disorders that are characterized by chronic hyperglycaemia resulting from relative insulin deficiency, insulin resistance or both. Two main categories of primary diabetes are type 1 DM and much more prevalent type 2 DM. The chronic complications of DM affect many organ systems and are responsible for the majority of morbidity and mortality associated with the disease. Chronic complications of DM are further subdivided into microvascular and macrovascular complications. Most of the patients with type 2 DM are diagnosed in the relatively late stages of a complex and progressive pathological process. The aims of treatment for type 2 DM are focused on optimizing quality of life. They are approached through symptom management, together with measures to both prevent and limit complications and associated disorders.

DM is a serious disease and a growing public health concern in both developed and developing countries. One in five adults in Sri Lanka has either diabetes or pre-diabetes and one third of those with diabetes are undiagnosed (Katulunda *et al.*, 2008).

The quality of life (QoL) represents the effect of an illness on patient, as perceived by the patient, and it is often used as an outcome measurement.

The present study was carried out to describe the physical health, psychological health, social relationship and environment aspects of QoL of diabetic patients in relation to healthy individuals and to describe selected sociodemographic and disease related factors associated with QoL among study population.

A cross sectional descriptive study was carried out among clinic attendees in the diabetic clinic of National Hospital of Sri Lanka. Four hundred and twenty two clinic attendees were included to the study by systematic sampling. An interviewer administered questionnaire collected sociodemographic characteristics and diabetes related factors and assessment of QoL was done using the already validated WHOQOL BREF Sinhala version. Data was analyzed using SPSS 16.0 package and appropriate statistical tests were applied.

The study revealed that people with DM have significant poor QoL compared to healthy individuals. When considering the selected sociodemographic factors, study population of less educated (grade 5 or less) or not attended to school, and with less income (less than Rs. 10,000.00 or no income) had significantly poor QoL in all four aspects. Currently unmarried study population had significant poor QoL than currently married study population in both psychological and social relationship aspects of QoL. In addition, there were significant associations between age and physical health aspect of QoL. Present study showed that males had significant poor QoL in environment aspects of QoL than females. The patients with complications had a significant poor QoL in all aspects, than patients without complications. The patients who were on insulin had a significant poor QoL in physical health, psychological health and social relationship aspects, than who were on only oral hypoglycaemics. In addition, physical and psychological aspects of QoL were significantly low among the patients with more than 5 years of diabetes mellitus.

The prevention of complications is one of the most important issues regarding the health aspect as it is strongly associated with QoL of diabetes mellitus patients. Thus multidisciplinary approach is needed for the management of such patients.

It is necessary to educate all the clinic attendees regarding importance of good drug compliance, healthy dietary habits and adequate physical activities to minimize the introduction of insulin, which may in turn improve the QoL of these patients.

As income level was also a significantly associated factor of QoL in patients with DM, it can be improved with the help of community support groups and volunteer organizations by helping them to engage especially in self employment activities, or by providing costs of transport and drug etc. to increase the standard of living.

Since educational aspects were also significantly associated with QoL, it is recommended to include information on diabetes mellitus and its consequences, and importance of prevention of disease in the school curriculum.

**Key words:** Diabetes mellitus, Quality of life, Sri Lanka