SUMMARY

BACKGROUND AND OBJECTIVES

Diabetes mellitus is a growing cause for public health concern. In many countries, it is now a leading cause of death, disability and high health care cost. Diabetes mellitus poses great challenges to health care systems around the world by virtue of its frequency, and the cost and sufferings imposed by its complications. The complications of diabetes are a result of poor glycaemic control. Type 2 diabetes is responsible for over 90% of the cases of diabetes encountered in Nigeria. Many studies have been carried out mainly in the western world on factors associated with glycaemic control in subjects with diabetes mellitus. It was therefore important to undertake a study on factors that influence glycaemic control in persons with type 2 diabetes in Nigeria.

STUDY DESIGN AND METHODS

Two hundred and fifty type 2 diabetic subjects aged 30 years and above who met the inclusion criteria and are attending the Diabetes clinic of Jos University Teaching Hospital were recruited by simple random sampling. The subjects were diagnosed according to the WHO 1999
criteria. Socio-demographic and anthropometric data as well as medical history were obtained to determine the state of glycaemic control of the subjects. Laboratory investigations, including HbA$_1C$, fasting and 2hours post prandial plasma glucose levels and lipid profile were done. HbA$_1C$ < 7.0% was considered as good glycaemic control while > 7.0% was considered as poor glycaemic control.

RESULTS

A total number of 250 subjects participated in the study. One hundred and ninety-seven (78.8%) subjects had poor glycaemic control (HbA$_1C$ > 7%) while 53 (21.2%) subjects had good glycaemic control (HbA$_1C$ ≤ 7%). Age, social class, educational attainment, type of treatment and waist-hip ratio did not significantly affect state of glycaemic control. In contrast, multivariate analysis indicated that a BMI ≥ 25kg/m$^2$ (OR 4.52), duration of diabetes (OR 2.18) and uncontrolled hypertension (BP > 130/80mmHg, OR 33.2) were significant risk factors for poor glycaemic control. Dyslipidaemia occurred in 40% of the subjects.

CONCLUSION

The factors associated with glycaemic control in type 2 diabetic subjects attending JUTH are, an elevated body mass index, duration of diabetes, (> 5 years) and uncontrolled hypertension. The association of
obesity and uncontrolled hypertension with poor glycaemic control indicate the need for more aggressive control of weight and blood pressure in these subjects.