SUMMARY

Background:

Blindness from diabetic retinopathy is a preventable complication of diabetes mellitus if the retinopathy is detected early. Among other approaches, awareness of the prevalence and risk factors for diabetic retinopathy by health care professionals and diabetic patients could help in early detection, management and prevention of this complication. This study sets out to determine the prevalence and risk factors for diabetic retinopathy among diabetic patients attending the outpatient clinics of the Federal Medical Centre Owerri, Imo State. The hospital has a well established ophthalmology department where most diabetic patients are usually referred to when they experience marked reduction in vision. In the case of diabetic retinopathy, it becomes unfortunately late for any meaningful intervention to be made to save vision. Although primary care physicians working in the general outpatient clinics where most of these patients are first seen and treated are aware of the possibility of eye complications from diabetes, they tend to underscore the contributions of various risk factors to the development of these complications. It is therefore imperative to carry out this study in order to establish the prevalence of diabetic retinopathy and its associated risk factors so as to aid compliance with risk control measures and help drive the practice of continued retinopathy screening.

Methodology:

This was a cross-sectional analytical study of 200 diabetics using researcher administered questionnaire. Systematic random sampling method was adopted for selection of subjects. The study which spanned a period of 6 months lasted between 15th March and 15th September, 2010. The bio-data, weight, height, blood pressure, serum lipid profile, glycated haemoglobin values, fasting blood glucose levels and visual acuity were obtained directly from the subjects using the questionnaires. Body mass index, waist to hip ratio and conicity index values were derived from the measured values. The results were analyzed using statistical package for social sciences (S.P.S.S) version 15.0 and presented as tables showing means, frequencies and odds ratio with corresponding 95% confidence intervals. P-values less than 0.05 were considered to be statistically significant.

Results:

The prevalence of diabetic retinopathy in the study population was 43%. Positive correlation was found with higher educational level, married status, family history of hypertension, visual impairment, increasing LDL-C levels, increasing duration of disease, smoking and blood pressure of respondents. However, further analysis of the results using multiple regression, identified high body mass index, increasing glycated haemoglobin levels, high LDL-C levels, increasing age, and visual impairment as risk factors for diabetic retinopathy.

Conclusion:

Diabetic retinopathy is prevalent among diabetics in this part of the country. In view of the identified risk factors, it is recommended that risk control measures be adopted in the management of all diabetic patients seen by Family Physicians at the general outpatient clinics of the Federal Medical Centre Owerri.