Abstract

Introduction

Erectile Dysfunction (ED) is currently estimated to affect more than 150 million men worldwide and men experiencing this sexual disorder have demonstrated severe deficits within their personal relationships, self-confidence and overall quality of life. Diabetic individuals have been found to show an age-adjusted increased probability of ED of three times. Despite this, published studies into diabetic induced ED have failed to accurately observe significant relationships between risk factors and ED within a cohort of diabetic men that prove applicable to clinical practice.

Method

We conducted a cross-sectional observational study involving 813 diabetic male patients from a clinic in Bangladesh. This considered the prevalence, socio-demographic differentials and risk factors of ED. Using a semi-structured questionnaire, we assessed for modifiable risk factors that included hypertension, hyperlipidaemia, DM control and duration, BMI, smoking status, alcohol intake, comorbidities and DM treatment as well as non-modifiable risk factors of age, education, income and occupation. Sexual function was evaluated with the International Index of Erectile Function (IIEF) survey.

Using data analysis software SPSS, Chi square was employed to analysed discrete variables and binary logistic regression to analyse significant relationships. All analysis that established statistical significance of $p<0.05$ was represented through a confidence interval and odds ratio.

Results

Of the men included in the study, 73% reported varying degrees of erectile dysfunction. By adjusting for age, duration of diabetes, education and income, we found that dyslipidaemia (P=0.000) was a significant independent predictor of ED. Independently abnormal levels of cholesterol (P=0.000), HDL (P=0.000), LDL (P=0.000) and triglyceride levels (P=0.000) all proved to be significant determinants of ED in the study population. The outcome of the research indicated that dyslipidaemia occurs synergistically with diabetes to correlate an increased frequency of ED.

Conclusion

Dyslipidaemia was found to be a predictor of erectile dysfunction in diabetic patients. Clinicians should promote regular cholesterol and erectile dysfunction screening in diabetics to prevent these complications.