

# Lipid profile of ambulatory patients with type 2 diabetes mellitus at Kenyatta National Hospital, Nairobi.

Abstract:

Patients with type 2 diabetes are at high of cardiovascular events because they have abnormal lipid status compared to their non-diabetic counterparts. OBJECTIVE: To determine the quantitative lipid profile of ambulatory patients with type 2 diabetes mellitus. DESIGN: Prospective, cross-sectional descriptive study. SETTING: Out-patient diabetic clinic of the Kenyatta National Hospital. SUBJECTS: Ambulatory patients with type 2 diabetes but without obvious cardiovascular, renal or foot complications. RESULTS: A total of 213 patients with type 2 diabetes were studied, 56.8% were females. The age range of the study population was 34 to 86 years, mean(sd) age of females was 54.45 (9.4) years and that of males was 55.83 (9.3) years. The mean body mass index (BMI) of females was 27.85 (6.2) kg/m<sup>2</sup> and 25.98 (5.8) kg/m<sup>2</sup> for males. The female subjects were more obese than the males in this study. Over 70% of the study participants had total cholesterol > 4.2 mmol/l, 43.8% and 57.6% of the females and males respectively had LDL-C > 2.6 mmol/l, 25.6% of the females and 30% of the males had HDL-C < 1.00 mmol/l. Only a modest proportion of males (28.3%) and females (32.2%) had triglycerides > 1.7 mmol/l. The LDL-C showed a significant positive correlation with age, duration of diabetes, fasting blood glucose, and total cholesterol but no correlation with glyated haemoglobin, body mass index, gender and the mode of glucose-lowering treatment. CONCLUSION: There was significant proportion of quantitative dyslipidaemia in the study population especially with the Total--and LDL- cholesterols. Although treatment goals and lipid thresholds for cardiovascular risk in diabetes are not yet well-defined, even by the large randomized trials, high-risk patients with significant quantitative dyslipidaemia would require deliberate effort to correct the abnormal values to reduce the risk status. These high-risk patients without complications but already had significant dyslipidaemia, which enhances the risk of cardiovascular events, certainly required therapeutic intervention.