SUMMARY

This study was aimed at determining the prevalence and pattern of dyslipidaemia among adult hypertensive patients at the General Outpatient Department (GOPD) of the University of Benin Teaching Hospital (UBTH), Benin City. The study was carried out using three hundred (300) consecutive adult hypertensive patients (aged ≥ 18 years) attending the General Practice Clinic of UBTH and who met the inclusion criteria for the study. In addition to the collection of demographic variables, blood lipid profiles were assessed.

The mean age of the respondents was 47.6 ± 12.5 years. The age ranged from 18 to 80 years, with those aged 40 to 59 years accounting for nearly 60% of them. One hundred and fifty nine (53.0%) of the patients were females while 141(47.0%) were males, with a female to male ratio of 1.13:1. The body mass index revealed that 134 (44.7%) of the respondents were overweight while 77 (25.7%) were obese.

Sixty–one (20.3%) of the respondents had elevated total cholesterol levels (≥200mg/dl or ≥ 5.26mmol/l), 77 (25.7%) had elevated levels of triglyceride (> 150mg/dl or > 1.7mmol/l), 107 (35.7%) had depressed levels of HDL (≤ 40mg/dl or ≤ 1.05mmol/l) while 78 (26.0% had elevated levels of LDL (≥ 130mg/dl or ≥ 3.35mmol/l).

The mean ± SD atherogenic index which is derived from the ratio of TC:HDL-C was found to be 3.9± 2.2. Eighty-two (27.3%) of the respondents were at cardiovascular risk (MAI > 4.5). The coronary heart disease risk of the respondents, which is derived from the ratio of HDL-C: TC showed that 174 (58%) had low to average risk and 77 (25.7%) were at high risk (CHD ratio <0.18).

The study found that depressed HDL level 107 (35.7%) was the most prevalent dyslipidaemia among the lipid components. There was no statistically significant relationship between all the lipids components and gender. However, there was a statistically significant relationship between HDL-C levels and body mass index. The finding could be explained that depressed HDL-C correlates with over weight and obesity. This could explain the significant difference in mean serum HDL-C levels among the BMI groups. Therefore, strategies should be designed for weight reduction in adult hypertensives to prevent cardiovascular disease. There was a statistically significant association between mean atherogenic index and hypertension severity. There was also a statistically significant association between coronary heart disease risk ratio and hypertension severity.

The study concluded that dyslipidaemia is prevalent among adult hypertensive patients in our environment. This corroborated the findings in the past study on the submission that dyslipidaemia is an important issue of concern that need attention in hypertensives.

The study recommended that there should be a change in the attitude of physicians to enhance the screening of hypertensive patients for dyslipidaemia and its management. In addition, severity of hypertension should be determined for all patients at presentation to know those at risk of cardiovascular complications. Furthermore, all hypertensive patients whose lipid profiles have been determined should have their mean atherogenic index (TC: HDL – C) ratio and coronary heart disease risk (HDL – C : TC) ratio calculated to know those who are at cardiovascular risk.