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Dyslipidemia and its associated factors among adult cardiac patients at Ambo University Referral Hospital, Oromia region, west Ethiopia

Abstract:

Background: Cardiovascular disease is a cluster of illnesses that affect the heart and blood vessels. Dyslipidemia is the most common risk factor for cardiovascular disease, causing more than 4 million deaths each year worldwide. However, there is very little evidence concerning the prevalence and pattern of dyslipidemia among cardiac patients in Ethiopia.

Methods: Hospital-based cross-sectional study was conducted from June to September 2022 at Ambo University referral hospital. Data on socio-demographic, clinical and anthropometric features were collected from adults with cardiac diseases using a convenient sampling technique. Lipid profiles and uric acid were measured from overnight fasting blood. The National Cholesterol Education Program Adult Treatment Panel (NCEP-ATP) III criteria were used to define dyslipidemia.

Results: A total of 269 participants were enrolled and overall 76.6% [95% confidence interval (CI):72.1–81] of patients had at least one dyslipidemia. The prevalence of total cholesterol (TC) 200 mg/dl, triglyceride (TG), LDL-cholesterol and HDL-cholesterol⁵⁴ was associated with TC and TG dyslipidemia, adjusted odds ratio (aOR) and (95% CI) were 2.6(1.4–4.8) and 2.4(1.2–4.7), respectively. While, a family history of heart disease, sedentary lifestyle and obesity were associated with TC dyslipidemia, aOR (95%CI) were 1.9(1.1–3.5), 1.4 (1.4–14.6) and 6.7 (1.4–32.5), respectively. In addition, diabetes mellitus and abdominal obesity were significantly associated with TG dyslipidemia, aOR (95%CI) were 1.9(1.0–3.6) and 2.6(1.16–5.8), respectively. Moreover, uric acid was positively correlated with TC and TG levels.

Conclusions: The results indicate that more than 75% of the cardiac patients had at least one dyslipidemia. This reflects the need for regular monitoring of lipid profiles and intensive counselling in this population to mitigate further cardio-metabolic complications.

Biography

I am **Bedasa Addisu Nasi** and 27 years old. I completed my master's degree in clinical laboratory science speciality in clinical chemistry from Jimma University, Ethiopia in 2015. Currently am working at Debre Berehan University as a lecturer of clinical chemistry and fully engaged in doing research on non-communicable diseases which is my area of focus. Accordingly, I have about 4 relevant publications in this area.