ABSTRACT

Patterns of Dyslipidemia and Cardiometabolic Characteristics among Patients Attending a Chronic Disease Management Program in Indonesia

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Background : Dyslipidemia are major concerns among patients with hypertension. Understanding their distribution is important for improving cardiovascular risk assessment and chronic disease management in primary care.

Objective : This study aimed to describe patterns of dyslipidemia and cardiometabolic characteristics among patients enrolled in Indonesia's Chronic Disease Management Program (Prolanis).

Research Methods/ Implementation Methods : A cross-sectional observational study was conducted among 203 active Prolanis participants diagnosed with hypertension at Samarinda Kota Public Health Center, East Kalimantan, Indonesia, during 2024–2025. Participants were selected using total sampling. Data were obtained from medical records containing blood pressure, body mass index (BMI), lipid profiles, and renal biomarkers. Dyslipidemia indicators were defined as total cholesterol ≥200 mg/dL, low-density lipoprotein cholesterol (LDL-C) ≥130 mg/dL, high-density lipoprotein cholesterol (HDL-C) <40 mg/dL, and triglycerides ≥150 mg/dL. Descriptive statistics were used to summarize demographic and clinical characteristics.

Results : Among the 203 participants, 142 (70.0%) were female, and 131 (64.5%) were aged below 60 years. Elevated total cholesterol was observed in 136 participants (67.0%), while 114 (56.2%) had elevated LDL-C. Low HDL-C was identified in 40 participants (19.7%), and elevated triglycerides in 81 (39.9%). Additionally, 124 participants (61.1%) had a BMI ≥25 kg/m², and 110 (54.2%) had uncontrolled hypertension. Elevated urea and creatinine levels were found in 17 (8.4%) and 21 (10.3%) participants, respectively. Abnormal urine microalbumin levels were reported in 120 participants (59.1%).

Conclusion/Lesson Learned : Elevated total cholesterol and LDL-C were the most prevalent lipid abnormalities in this population. The coexistence of dyslipidemia, excess body weight, uncontrolled hypertension, and abnormal urine microalbumin underscores the importance of comprehensive cardiometabolic assessment in primary care-based chronic disease management programs.

Keyword : Cardiometabolic Characteristics; Dyslipidemia; Prolanis