

**ABSTRACT**  
**Drug Utilization Study of Lipid Lowering Drugs on Patients with  
Chronic Kidney Disease**  
**(Study at Nephrology and Hypertension Outpatient Department  
Dr. Soetomo Hospital Surabaya)**

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CKD is characterized by decreased Glomerular Filtration Rate (GFR) > 3 months. The presence of dyslipidemia in CKD, may lead to increased risk of CVD mortality. Renal mesangial cells have LDL receptors which can oxidize LDL. LDL oxidation, which induce the production and release of inflammatory cytokines, vasoactive substance, and macrophage chemotactic factors, is toxic to mesangial cells. Then oxidized LDL cause alteration of macrophages into foam cells which increase the release of local's inflammatory mediators and injured glomeruli. So that, dyslipidemia in CKD is a high risk for cardiovascular disease, atherosclerosis, and progressive glomerular damage. This study was aimed to review the pattern of lipid lowering drug used in patients with CKD at The Nephrology and Hypertension Outpatient Department Dr. Soetomo Hospital Surabaya. This cross sectional study was conducted from March to May, 2013, and was analyzed possibility of drug use and drug-related problems of lipid lowering drugs. There were 91 patients studied, consisted of 61.5% male and 38.5% female patients and most of the patient (36,3%) are in the age group 60-69 years and CHD is the highest comorbid/complications (13.2%). Types of dyslipidemia drugs class used are (93.4%) and fibrate (fenofibrate (4.4%) and gemfibrozil (2.2%). The most dyslipidemia drugs prescribed were HMG Co-A reductase inhibitor, simvastatin (95.6%). There were four types of DRPs identified in this study: improper drug selection (5.5%), improper dosing regimen (1.1%), drug interaction potential (5.5%), and compliance of patients (6.6%).

**Keyword** : drug utilization study, chronic kidney disease, dyslipidemia, lipid lowering drugs