

## ***ABSTRACT***

### **DRUG UTILIZATION STUDY OF ACE-INHIBITORS IN PATIENT WITH HEART FAILURE (Study at Department of Cardiology Inpatient Care Dr. Soetomo Hospital Surabaya)**

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Heart failure is a clinical syndrome caused by the inability of the heart to pump sufficient blood to meet the metabolic needs of the body. It can result from any disorder that reduces ventricular filling (diastolic dysfunction) and/or myocardial contractility (systolic dysfunction). The leading causes of heart failure are coronary artery disease and hypertension. The primary manifestations of the syndrome are dyspnea, fatigue, and fluid retention. Heart failure is a complex pathophysiological condition, requiring appropriate therapy for patients. One of the therapy is ACE-inhibitors.

The aims of this study was to determine the profile of ACE-inhibitors used in patient with heart failure, and identify drug related problems (DRPs) of ACE-inhibitors. It was a retrospective study during period 1 January to 31 December 2013 at Department of Cardiology Inpatient Care Dr. Soetomo Hospital Surabaya. The data obtained then compared with the guideline, journals, and textbooks.

The results showed that from 45 patients with heart failure, majority was men (66.7%), in the age of 60-69 years old. ACE-inhibitors used were captopril (75.6%) at dose 3x6.25 mg, 3x12.5 mg, and 3x25 mg, lisinopril (20.0%) at dose 1x2.5 mg, 2x2.5 mg, 1x5 mg, and 2x5 mg, and ramipril (17.8%) at dose 1x2.5 mg and 1x5 mg. Drug related problem (DRP) that found in this study were adverse drug reaction, like dry cough, hypotension, and ACE-inhibitors interaction with other drugs.

Drug utilization of ACE-inhibitors in patient with heart failure at Dr. Soetomo Hospital were appropriate according to Diagnose and Therapy Guideline of Heart Failure.

Keywords: ACE-inhibitors, Drug Utilization Study, Heart Failure,