

**ABSTRACT**

**Drug Utilization Study of Patient with Mitral Valve Disease  
(Study at Dr. Soetomo General Hospital Surabaya)**

Etza Fadila

Mitral valve disease is representation of cardiac dysfunction caused by abnormal structure or function of the mitral valve. There are two types of mitral valve disease, mitral stenosis and mitral regurgitation. Mitral stenosis is an obstruction of blood flow from the left atrium to the left ventricle on the mitral valve. Mitral regurgitation causes obstruction of blood flow from the left ventricle to the left atrium. The prevalence of mitral regurgitation is greater than mitral stenosis.

The aim of the study was to review the profile of drug use in patients with mitral valve disease at Dr. Soetomo General Hospital Surabaya. The research was a retrospective observational study, using a descriptive analysis. The study sample was taken by consecutive sampling method, obtained 49 patients since 1<sup>st</sup> January 2015 until 31<sup>st</sup> December 2018 (3 years) who met the inclusion criteria. Patient demographic data showed that patients with mitral valve disease were dominated by women (75%) with age 45-64 years. Prevalence of patients with mitral valve disease in Dr. Soetomo General Hospital Surabaya had higher mitral regurgitation (40%) than mitral stenosis (35%). Patients could have both mitral regurgitation and mitral stenosis (25%). The highest comorbidities of patients were atrial fibrillation (44%). Most of the patients felt shortness of breath (50%).

The results showed that drugs used by patients were diuretics (90%),  $\beta$ -blockers (67%), anticoagulants (57%), digoxin (49%), ACE inhibitors (37%), antibiotics (20%), vasodilators (10%), Ca channel blockers (6%), and antiplatelets (6%). It was different between Mitral Stenosis and Mitral Regurgitation. Mitral Regurgitation used Vasodilator and antiplatelet, while Mitral Stenosis used Antibiotik. The most potential drug interactions were Spironolactone and Digoxin (30%). The highest potential side effect in patients was hypotension (22%).

**Keywords.** Anticoagulant, Diuretic, Drug Utilization Study, Mitral Valve Disease,  $\beta$ -blockers.