

ABSTRACT

DRUG UTILIZATION STUDY OF BETA-BLOCKERS ON HEART FAILURE PATIENTS

(Research Conducted in Cardiac Wards/Departement Heart and Vascular Medicine of RSUD Dr. Soetomo Surabaya)

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Background: Heart failure is a progressive clinical syndrome that occurs from changes in the structure or function of the heart that interfere with the ventricular ability to charge or pump blood due to impaired systolic and/or diastolic function. In the management of heart failure therapy, there is pharmacological therapy. One of the pharmacological therapies carried out is using *beta-blockers*.

Objective: The purpose of this study was to determine the usage profile of the *beta-blockers* drug in patients with heart failure, which treated in the cardiac wards of RSUD Dr. Soetomo Surabaya from 1 July to 31 December 2017. The studied usage profile includes type, dose, side effects, and drug interactions.

Method: This research is a retrospective study by using patient medical record, the result of the research is then analyzed descriptively.

Results: From the analysis, it can be concluded that there were 26 patients who met the inclusion criteria. The results showed that the *beta-blockers* used were bisoprolol (100%) and of the 26 patients, there was one patient who experienced a change of therapy from bisoprolol to carvedilol. A total of 25 patients (96.15%) were given a *beta-blocker* dose according to the AHA guidelines, namely bisoprolol which is 1x1,25 mg and 2,5 mg while the dose of carvedilol was 2x12.5 mg. There was one patient (3.85%) whose dosage was not in accordance with the AHA guidelines, namely bisoprolol 2x2.5 mg. The side effects are hypotension and bradycardia. There was four patients (15%) experienced side effects. A total of 3 patients had hypotension and one patient had hypotension and bradycardia.

Conclusions: The use of *beta-blockers* for the heart failure treatment should be done carefully and performed under health care professional to achieve optimal therapeutic results.

Keywords: beta-blockers, drug utilization study, heart failure