

Cost Analysis of Antidiabetic Combination Therapy in Type 2 Diabetes Mellitus Patients Inpatient National Health Insurance (NHI) at Panembahan Senopati Hospital Bantul

**Annisa Rizqa Maghfira
Prodi Farmasi**

ABSTRACT

Diabetes is a complex chronic disease requires ongoing medical care with a risk reduction strategy for complications. The varied use of oral antidiabetic combination therapy in type 2 DM patients with inadequate blood glucose control will result in differences treatment costs. Drug therapy in patients with diabetes mellitus carried out for life so it requires a large amount of money. This study aims to determine the cost of antidiabetic combination therapy and the difference in real costs with 2016 INA-CBG's rates in patients with type 2 diabetes mellitus hospitalized at JKN Panembahan Senopati Hospital Bantul. This study was an observational analytic study with a cross-sectional design. Sampling by purposive sampling method and data collection retrospectively from medical record data obtained from medical record installations, while the real costs and hospital claims data of type 2 diabetes mellitus patients hospitalized JKN were obtained from the finance and guarantee section. Data analysis was carried out by descriptive analysis which included presenting data in the form of a real patient cost picture obtained from the patient billing cost detail form and an overview of the difference between the real costs of INA-CBG rates by reducing INA-CBG's claims to the real costs of patients. The subjects of the study were JKN type 2 diabetes mellitus patients with INA-CBG's code E-4-10 at Panembahan Senopati General Hospital Bantul in 2017 and using antidiabetic combination therapy. The research subjects were 33 cases. The results showed that the most widely used antidiabetic combination therapy was combination therapy of Insulin Aspart and Insulin Detemir as many as 12 patients (36.36%), while therapy that has a clinical outcome with a percentage of 100% there are 4 groups, namely a combination of biguanid and sulfonylurea, fast-acting insulin and biguanid, fast acting insulin followed by biguanid and sulfonylurea, fast-acting insulin and long-acting insulin followed by sulfonylureas. The average direct medical cost of type 2 diabetes mellitus patients in Panembahan Senopati General Hospital Bantul is Rp. 4.366.709. The difference in real costs with the rate of INA CBG's is +15.273.093. The Kruskal-Wallis statistical test results $p > 0.05$ with value 0,207 which means that there are no significant differences between the real costs and the INA CBG's rates .

Keywords: Cost analysis, diabetes mellitus, antidibetic combination, INA-CBG's