ABSTRACT

Drug Utilization Study of Oral Antidiabetic (OAD)
in Patient with Type 2 Diabetes Mellitus
(Studied in Outpatient Unit Airlangga Hospital Surabaya)

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Diabetes mellitus is the chronic disorder emerging as a major world health problem which increase the rate of morbidity and mortality. In most cases, patients with OAD therapy will require not only an increase dose, but also the addition of a second and third OAD or combination OAD-insulin. The aim of this study are to know profile utilization of OAD drugs in patients with type 2 diabetes mellitus, correlate between a utilization profile of OAD with clinical conditions, especially blood glucose level and identify drug related problems (DRPs) in patients with oral diabetic therapy. It was an observational-descriptive study, data was collected cross-sectional with non random-purposive sampling method in the period March 2016 until May 2016 in the Outpatient Unit Airlangga Hospital Surabaya. The results of observational study on 240 patients showed oral antidiabetic therapy that used in this study, 36.67% patients used OAD (monotherapy or combination) and 63% patients used a combination of OAD-insulin. In this study, OAD that commonly used was biguanid (metformin) 67.33% patients, sulfonylureas (glimepiride, glibenklamid, gliclazide and gliquidon) 65.83% patients, alpha-glucosidase inhibitor (Acarbose) 27.50% patients, thiazolidinedion (pioglitazon) 10.00% patients and DPP-4 inhibitor (linagliptin) 0.42% patient. Based on the glycemic targets, patients with blood glucose levels achieved with glycemic targets are 25.50% of patients, which was not achieved in 75.50% of patients and hypoglycemia 4.00% of patients. Drug related problems can be identified is such as adverse drug reaction that is flatulence (7.92%), nausea (6.25%), metallic taste (0.83%), bloating (0.83%) and hypoglycemia (2.5%) and potential drug interactions (23.75%).

Keyword : Drug utilization study, type 2 diabetes mellitus, oral antidiabetic (OAD)