

ABSTRAK

Diabetes Melitus (DM) tipe 2 merupakan penyakit metabolik yang dapat menyebabkan gangguan ginjal. Penggunaan jenis dan dosis obat antidiabetik oral yang tidak rasional pada pasien DM tipe 2 berpotensi gangguan ginjal dapat memperburuk fungsi ginjal dan meningkatkan risiko kematian. Penelitian ini mengkaji hubungan antara penggunaan dosis dan jenis antidiabetik oral dengan nilai *estimated Glomerular Filtration Rate (eGFR)* sebagai indikator fungsi ginjal. Penelitian ini bertujuan menganalisis rasionalitas penggunaan dosis obat antidiabetik oral pada pasien DM tipe 2 terhadap nilai *eGFR* di 8 Puskesmas Kabupaten Sleman. Penelitian menggunakan metode observasional dengan rancangan studi *cross-sectional retrospektif*. Data dikumpulkan dari rekam medis pasien rawat jalan periode Januari 2025 hingga Desember 2025 dengan cara *cluster random sampling*. Kriteria inklusi meliputi pasien DM tipe 2 dengan GKG berusia 40-70 tahun yang terdaftar dalam PROLANIS dan rutin kontrol minimal dua kali dalam setahun. Analisis data meliputi statistik deskriptif untuk menggambarkan karakteristik pasien, dan uji *paired sample T-test* untuk mengetahui perbedaan rata-rata yang signifikan antara tiga kelompok jenis obat antidiabetik oral terhadap nilai *eGFR*. Hasil penelitian menunjukkan bahwa terdapat 90 pasien dengan penggunaan dosis obat antidiabetik oral yang rasional (100%), mayoritas pasien berjenis kelamin perempuan (68,9%), usia 40-59 tahun (57,8%), memiliki komorbid <3 penyakit dan non polifarmasi (65,6%) dan sebagian besar pasien berada pada stadium G1 dan G2. Hasil analisis bivariat menunjukkan tidak terdapat perbedaan signifikan nilai *eGFR* awal dan *eGFR* akhir berdasarkan tiga kelompok jenis pengobatan antidiabetik oral.

Kata kunci: diabetes melitus tipe 2, nilai *eGFR*, obat antidiabetik oral

ABSTRACT

Type 2 Diabetes Mellitus (T2DM) is a metabolic disorder that may lead to impaired kidney function. The irrational use of oral antidiabetic drugs, including inappropriate drug selection and dosing, in patients with T2DM and kidney impairment can worsen renal function and increase the risk of mortality. This study examined the relationship between the type and dosage of oral antidiabetic therapy and estimated Glomerular Filtration Rate (eGFR), an indicator of kidney function. The aim of this study was to analyze the rationality of oral antidiabetic drug dosing and its association with eGFR values in patients with T2DM at 8 primary healthcare centers in Sleman Regency. This study employed an observational design with a retrospective cross-sectional study design. Data were collected from outpatient medical records from January to December 2025 using cluster random sampling. The inclusion criteria were patients aged 40-70 years with T2DM and CKD who were registered in PROLANIS and attended routine check-ups at least twice a year. Data analysis comprised descriptive statistics to describe patients' characteristics and Differences in baseline and eGFR values among the three oral antidiabetic treatment groups were analyzed using the paired sample t-test. The study results showed that all 90 patients received rational doses of oral antidiabetic drugs (100%), the majority were female (68,9%), aged 40-59 years (57,8%) had fewer than three comorbidities and were not exposed to polypharmacy (65,6%), and most patients were at stages G1 and G2. Bivariate analysis results demonstrated that there were no statistically significant differences in baseline and final eGFR values based on the three groups of oral antidiabetic treatment types.

Keywords: type 2 diabetes mellitus, eGFR value, oral antidiabetic drugs