

ABSTRAK

Pasien diabetes melitus tipe 2 (DMT2) tidak jarang disertai dengan komorbid sehingga harus mengonsumsi beberapa jenis obat secara bersamaan. Hal ini berpotensi menimbulkan kejadian *drug-related problems* (DRPs) yang dapat memengaruhi kendali glikemik pasien. Penelitian ini bertujuan untuk mengetahui pengaruh DRPs obat antidiabetes oral pasien terdiagnosis DMT2 terhadap luaran HbA1c di puskesmas Kabupaten Sleman, Daerah Istimewa Yogyakarta. Desain yang digunakan dalam penelitian ini adalah kohort retrospektif dengan mengambil data rekam medis pasien DMT2 yang ada di puskesmas Kabupaten Sleman selama periode Januari–Desember 2025. Pemilihan sampel menggunakan teknik *cluster random sampling* dengan total sampel yang diperoleh sebanyak 148 data rekam medis, meliputi 100 data rekam medis dengan kejadian DRPs dan 48 data rekam medis tanpa DRPs. Analisis univariat dilakukan untuk menilai karakteristik sampel dan analisis bivariat dengan uji *Chi-square* dilakukan untuk melihat hubungan antara kejadian DRPs obat antidiabetes oral terhadap luaran HbA1c. Selain itu, dilakukan analisis multivariabel untuk mengetahui domain DRPs yang berpotensi paling tinggi terhadap luaran HbA1c tidak terkontrol. Karakteristik sampel pasien DMT2 berdasarkan hasil penelitian lebih banyak berjenis kelamin perempuan, berusia lanjut (usia ≥ 60 tahun), komorbiditas tinggi (≥ 3 komorbid), tidak polifarmasi, dan luaran HbA1c terkontrol. Kejadian DRPs yang paling banyak ditemui adalah DRPs terkait keamanan (47,3%). Hasil uji statistik menunjukkan adanya pengaruh signifikan antara kejadian DRPs obat antidiabetes oral pada persepsian obat pasien DMT2 terhadap kontrol HbA1c ($p\text{-value} < 0,001$). Pasien DMT2 yang pada pengobatannya teridentifikasi DRPs, 12,240 kali berisiko memiliki luaran HbA1c yang tidak terkontrol dibandingkan pasien DMT2 tanpa DRPs (RR 12,240; 95% CI 3,109–48,141). DRPs terkait efektivitas berpotensi paling besar pada luaran HbA1c tidak terkontrol (RR 5,392; 95% CI 3,592–8,095).

Kata kunci: diabetes melitus tipe 2, DRPs, HbA1c, obat antidiabetes oral

ABSTRACT

Patients with type 2 diabetes mellitus (T2DM) often have comorbidities, requiring them to take several medications simultaneously. This can potentially lead to drug-related problems (DRPs) that can affect patients' glycemic control. This study aims to determine the effect of DRPs on HbA1c outcomes in patients diagnosed with T2DM in Sleman Regency, Yogyakarta. This study used a retrospective cohort design by collecting medical records of T2DM patients at community health centers in Sleman Regency during the period of January 2025–December 2025. Samples were selected using cluster random sampling method with total 148 medical records by the end of the selection, including 100 medical records with DRPs and 48 medical records without DRPs. Sample characteristics were assessed through univariate analysis. The relationship between the incidence of DRPs associated with oral antidiabetic drugs and HbA1c outcomes was examined through bivariate analysis using the Chi-square test. A multivariable analysis was conducted to determine the DRPs domains with the highest potential for uncontrolled HbA1c outcomes. The study found that T2DM patients were predominantly female, elderly (aged ≥ 60 years), had high comorbidities (≥ 3 comorbidities), did not use polypharmacy, and had controlled HbA1c outcomes. The most common DRPs were safety-related DRPs (47.3%). The results of statistical tests showed a significant correlation between the occurrence of DRPs of oral antidiabetic drugs in the prescription of T2DM patients on HbA1c control (p-value < 0.001). T2DM patients whose treatment identified DRPs, 12,240 times the risk of having uncontrolled HbA1c outcomes compared to T2DM patients without DRPs (RR 12,240; 95% CI 3,109–48,141). The DRPs related to effectiveness had the greatest potential for uncontrolled HbA1c outcomes (RR 5.392; 95% CI 3.592–8.095).

Keywords: type 2 diabetes mellitus, DRPs, HbA1c, oral antidiabetic drugs