

## INTISARI

Terapi diabetes melitus khususnya pada pasien dengan penurunan fungsi ginjal memerlukan pemantauan secara khusus, salah satunya dengan melakukan individualisasi dosis berdasarkan nilai klirens kreatinin pasien. Penelitian ini bertujuan untuk mengetahui kesesuaian pendosisan dan luaran terapi penggunaan obat antidiabetik oral pada pasien diabetes melitus dengan mempertimbangkan fungsi ginjal pasien.

Penelitian ini merupakan penelitian *cross sectional* dengan pengambilan data secara retrospektif yang dilakukan di RSUP Dr. Sardjito Yogyakarta dan RS PKU Muhammadiyah Yogyakarta. Teknik pengambilan sampel dilakukan secara *purposive sampling*. Pengambilan data dilakukan melalui rekam medis pasien rawat inap selama periode Januari 2017 - Januari 2019 dengan total 100 kasus. Subjek penelitian adalah pasien diabetes melitus dengan kode diagnosis ICD-10 E.11 dan E.14 yang memenuhi kriteria inklusi. Data yang diperoleh kemudian dianalisis secara deskriptif. Identifikasi kesesuaian pendosisan dilakukan dengan membandingkan dosis yang didapatkan pasien dengan pustaka *Drug Information Handbook 20th edition, British National Formulary 76th edition*, maupun dengan persamaan *Giusti Hayton*. Luaran terapi dilihat dari kadar gula darah sewaktu (GDS) dan gula darah puasa (GDP) pasien.

Hasil penelitian menunjukkan bahwa dari 100 kasus rawat inap, pemberian antidiabetik oral dengan dosis sesuai sebanyak 54 (54%) kasus dan tidak sesuai sebanyak 46 (46%) kasus. Persentase dosis sesuai dengan luaran terapi terkontrol sebesar 39 (72,22%) kasus dan tidak terkontrol sebesar 15 (27,78%) kasus. Sementara itu pemberian dosis tidak sesuai dan menunjukkan luaran terapi terkontrol sebesar 35 (76,09%) kasus dan tidak terkontrol sebesar 11 (23,91%) kasus.

Kata kunci: Diabetes melitus, penurunan fungsi ginjal, klirens kreatinin, kesesuaian pendosisan, luaran terapi

## ABSTRACT

Therapy of diabetes mellitus especially for patients with reduced kidney function required special therapeutic monitoring. One of the method to monitor patient's therapy is with individualizing the dose according to its creatinine clearance (CrCl). This study aimed to determine the appropriateness of dose and therapy outcomes of oral antidiabetic drugs in patients with diabetes mellitus by considering the kidney function of the patients.

This study was a cross sectional with retrospective data collection that was obtained from RSUP Dr. Sardjito Yogyakarta and RS PKU Muhammadiyah Yogyakarta with purposive sampling technique. The data were collected from medical records of inpatients during the period of January 2017 - January 2019 with a total of 100 patients. The study subjects were diabetic mellitus patients with diagnosis codes (ICD-10) E.11 and E.14 who met the inclusion criteria. The data collected were then analyzed descriptively. Identification of the dose appropriateness were done by comparing patient's dose with the reference of the Drug Information Handbook 20th edition, the British National Formulary 76th edition, and Giusti Hayton's equation. Therapy outcomes were seen from the random glucose level and fasting blood glucose level.

The results showed that out of 100 inpatient cases, the appropriate oral antidiabetic administration were 54 (54%) cases and 46 (46%) cases were inappropriate. Patients who received appropriate oral antidiabetic dose with controlled therapy outcome were 39 (72,22%) cases and uncontrolled therapy outcome were 15 (27,78%) cases. Whereas, patients who received oral antidiabetic at an inappropriate dose with controlled therapy outcome were 35 (76,09%) cases and uncontrolled therapy outcome were 11 (23,91%) cases.

**Keywords:** diabetes mellitus, reduced kidney function, creatinine clearance, dose appropriateness, clinical outcome