

GAMBARAN POTENSI INTERAKSI OBAT METFORMIN PADA PASIEN DIABETES MELITUS DI APOTEK X WILAYAH KABUPATEN SLEMAN

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INTISARI

Latar Belakang: Diabetes melitus adalah kondisi medis di mana kadar gula darah sewaktu pada penderitanya di atas normal, yaitu mencapai ≥ 200 mg/dL, serta kadar gula darah puasa mencapai ≥ 126 mg/dL. Metformin sebagai pilihan pertama dalam pengelolaan terapi diabetes melitus tipe 2 merupakan obat yang paling umum digunakan, yang mengakibatkan metformin menjadi antidiabetik dengan potensi interaksi obat paling tinggi. Interaksi tersebut dapat mengakibatkan penurunan efek terapi, adanya efek farmakologis yang tidak diinginkan dan meningkatnya toksisitas obat.

Tujuan Penelitian: Menganalisa potensi interaksi obat metformin pada pasien diabetes melitus di Apotek X Wilayah Kabupaten Sleman.

Metode Penelitian: Desain penelitian ini adalah observasional deskriptif dengan pendekatan retrospektif. Penelitian dilakukan di Apotek X Wilayah Kabupaten Sleman periode Januari-Juni 2025 melalui data resep pasien diabetes melitus tipe 2. Pengambilan sampel dilakukan dengan teknik *purposive sampling* dan diperoleh sampel sebanyak 57 pasien yang memenuhi kriteria inklusi dan eksklusi. Data dikelompokkan menjadi karakteristik pasien (usia dan jenis kelamin), karakteristik pengobatan (regimen terapi, jenis obat, jumlah obat), serta potensi interaksi obat metformin. Data diolah menggunakan analisis univariat dan disajikan dalam bentuk jumlah dan persentase (%).

Hasil Penelitian: Mayoritas pasien diabetes melitus tipe 2 berada pada rentang usia 41-60 tahun (50,88%) dengan jenis kelamin perempuan (59,65%). Kebanyakan pasien mendapatkan regimen terapi kombinasi dua antidiabetik (57,89%), di mana jenis antidiabetik yang paling banyak digunakan secara tunggal adalah metformin (52,29%). Sebagian besar pasien mendapatkan jumlah obat < 5 obat (63,36%). Terdapat potensi interaksi obat sebanyak 70,18% dengan mekanisme farmakodinamik sebanyak 56,67% dan tingkat keparahan *moderate* sebanyak 83,33%.

Kesimpulan: Potensi interaksi obat metformin terjadi pada sebagian besar pasien diabetes melitus tipe 2 di Apotek X Wilayah Kabupaten Sleman.

Kata Kunci: Diabetes Melitus, Interaksi Obat, Metformin

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DESCRIPTION OF POTENTIAL DRUG INTERACTIONS OF METFORMIN IN DIABETES MELLITUS PATIENTS AT APOTEK X, SLEMAN

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ABSTRACT

Background: Diabetes mellitus is a chronic disease marked by fasting blood glucose levels ≥ 126 mg/dL and postprandial levels ≥ 200 mg/dL. Metformin is widely recognized as the first-line pharmacological agent in the management of type 2 diabetes mellitus and remains the most frequently prescribed antidiabetic drug. Its extensive use contributes to a high potential for drug interactions, which may compromise therapeutic efficacy, trigger unintended pharmacological effects, and increase the risk of drug toxicity.

Objective: Analyze the potential drug interactions involving metformin in patients with type 2 diabetes mellitus at Pharmacy X in Sleman.

Method: This study employed a descriptive observational design with retrospective approach was conducted at Pharmacy X, Sleman, using type 2 diabetes mellitus prescription data from January to June 2025. Samples were selected using purposive sampling, resulting in 57 patients who met the inclusion and exclusion criteria. Data were categorized into patient characteristics (age and gender), treatment characteristics (therapy regimen, drug types, number of drugs), and potential drug interactions involving metformin. Data were analyzed using univariate analysis and presented as frequencies and percentages (%).

Result: The majority of type 2 diabetes mellitus patients were aged 41–60 years (50.88%), female (59.65%), and had comorbidities (70.18%). Most patients received a combination therapy regimen of two antidiabetic drugs (57.89%), with metformin being the most commonly used monotherapy (52.29%). The majority received fewer than five medications (63.36%). Potential drug interactions were found in 70.18% of cases, predominantly pharmacodynamic in mechanism (56.67%) and of moderate severity (83.33%).

Conclusion: Potential metformin drug interactions occurred in the majority of type 2 diabetes mellitus patients at Apotek X in Sleman.

Keyword: Diabetes Mellitus, Drug Interaction, Metformin

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