

ABSTRAK

Prevalensi diabetes melitus tipe 2 pada kelompok usia muda, termasuk generasi Z (lahir tahun 1997–2012), mengalami peningkatan signifikan. Terapi kombinasi antidiabetes oral menjadi pilihan untuk mengontrol glukosa darah secara optimal. Namun, efektivitas klinis dan beban biaya dari berbagai kombinasi obat perlu dianalisis, terutama obat perlu di analisis karena Negara memiliki keterbatasan anggaran kesehatan. Menilai efektivitas biaya (*cost-effectiveness*) dari berbagai terapi kombinasi antidiabetes oral yang digunakan oleh pasien Gen Z rawat jalan di Rumah Sakit Dewi Sri Karawang. Penelitian ini merupakan studi deskriptif analitik dengan pendekatan *cross-sectional*. Data diambil dari rekam medis pasien Gen Z (usia 18–27 tahun) yang menjalani terapi kombinasi antidiabetes oral di Rumah Sakit Dewi Sri Karawang. Analisis biaya dilakukan dari perspektif rumah sakit dengan menghitung *direct medical cost*. Efektivitas diukur berdasarkan penurunan kadar gula darah sewaktu. Perhitungan *Average Cost Effectiveness Ratio (ACER)* dan *Incremental Cost Effectiveness Ratio (ICER)* digunakan untuk membandingkan efektivitas terapi. Kombinasi Glibenclamide 5 mg + Metformin 500 mg merupakan terapi yang lebih *cost-effective* karena hasil yaitu Rp 4.614/mg/dL untuk pasien Gen Z rawat jalan di Rumah Sakit Dewi Sri Karawang dibandingkan kombinasi Acarbose 50 mg + Metformin 500 mg dengan nilai ACER sebesar Rp 8.744/mg/dL. Berdasarkan hasil perhitungan ICER untuk pergantian apabila terjadi kekosongan obat Acarbose 50 mg + Metformin 500 mg ke Glimpiride 2 mg + Metformin 500 mg dibutuhkan penambahan biaya sebesar Rp 61.288/mg/dL. Hasil ini dapat menjadi pertimbangan dalam pengambilan keputusan terapi yang efisien dan terjangkau.

Kata kunci: *cost effective analysis*, antidiabetes oral, Gen Z, rawat jalan, diabetes tipe2.

ABSTRACT

The prevalence of type 2 diabetes mellitus among younger age groups, including Generation Z (born 1997–2012), has increased significantly. Combination therapy using oral antidiabetic drugs is a preferred approach to optimally control blood glucose levels. However, the clinical effectiveness and cost burden of various drug combinations need to be analyzed, especially considering the country's limited healthcare budget. This study aims to assess the cost-effectiveness of different oral antidiabetic combination therapies used by outpatient Generation Z patients at Dewi Sri Karawang Hospital. This research is a descriptive-analytic study with a cross-sectional approach. Data were obtained from the medical records of Generation Z patients (aged 12–27 years) undergoing oral antidiabetic combination therapy at Dewi Sri Karawang Hospital. The cost analysis was conducted from the hospital's perspective by calculating direct medical costs. Effectiveness was measured based on the reduction in random blood glucose levels. The Average Cost-Effectiveness Ratio (ACER) and Incremental Cost-Effectiveness Ratio (ICER) were used to compare the effectiveness of the therapies. The combination of Glibenclamide 5 mg + Metformin 500 mg was found to be more cost-effective, with a result of IDR 4,614/mg/dL for outpatient Generation Z patients at Dewi Sri Karawang Hospital, compared to the Acarbose 50 mg + Metformin 500 mg combination, which had an ACER value of IDR 8,744/mg/dL. Based on the ICER calculation, switching from Acarbose 50 mg + Metformin 500 mg to Glimpiride 2 mg + Metformin 500 mg, in the event of a stock-out, would require an additional cost of IDR 61,288/mg/dL. These findings may serve as a consideration for making efficient and affordable therapy decisions.

Keywords: *cost-effectiveness analysis, oral antidiabetic drugs, Generation Z, outpatient, type 2 diabetes.*