

INTISARI

Penyakit gagal ginjal kronis (GGK) dengan hipertensi umumnya menggunakan antihipertensi. Masalah yang timbul adalah beberapa antihipertensi terdialisis selama proses hemodialisis sehingga memerlukan *dose adjustment*. Penelitian ini bertujuan untuk mengetahui gambaran terapi antihipertensi dan hubungan antara *dose adjustment* dengan *outcome* terapi pada pasien gagal ginjal kronis dengan hemodialisis di Rumah Sakit Akademik UGM, serta mengetahui peran apoteker dalam *dose adjustment*.

Penelitian ini merupakan penelitian *cross sectional* dengan metode *consecutive sampling*. Metode pengambilan data dilakukan secara retrospektif dari rekam medik pasien rawat inap periode Januari 2021-Juni 2023. Pengambilan data juga dilakukan melalui wawancara dengan apoteker untuk mengetahui perannya dalam *dose adjustment*. *Dose adjustment* dihitung berdasarkan estimasi klirens kreatinin menggunakan persamaan *Cockcroft-Gault* dan nilai GFR menggunakan formula MDRD. Hubungan antara *dose adjustment* dengan *outcome* terapi dianalisis menggunakan *Chi-square*.

Hasil penelitian menunjukkan bahwa terdapat 83 pasien dengan 90 kasus rawat inap. Terdapat 339 antihipertensi yang digunakan, dengan penggunaan terbanyak adalah amlodipin (72,2%). Sejumlah 177 obat (52,2%) memerlukan *dose adjustment* dan dari obat tersebut, 158 obat (89,3%) diberikan dengan dosis sesuai dan 19 obat (10,7%) dengan dosis tidak sesuai. Terdapat 70 kasus (77,8%) dengan *outcome* terapi membaik dan 20 kasus (22,2%) dengan *outcome* terapi tidak membaik. Uji statistik *Chi-square* menunjukkan tidak terdapat hubungan antara *dose adjustment* antihipertensi dengan *outcome* terapi pada pasien rawat inap gagal ginjal kronis (OR 2,259, 95% CI = 0,660-7,734, *p-value* = 0,291). Apoteker klinis juga berperan penting dalam mengelola *dose adjustment* untuk meningkatkan perawatan pasien serta mencegah *adverse event*.

Kata kunci: gagal ginjal kronis, *dose adjustment*, antihipertensi, *outcome* terapi

ABSTRACT

Chronic kidney disease (CKD) with hypertension commonly uses antihypertensives. The problem is that some antihypertensives are dialyzed during the hemodialysis process and require dose adjustments. This study aims to determine the description of antihypertensive therapy and the relationship between dose adjustment and therapeutic outcomes in CKD patients with hemodialysis at Rumah Sakit Akademik UGM, and to determine the role of pharmacists in dose adjustment.

This research is cross-sectional study with consecutive sampling. Data were collected retrospectively from the medical records of hospitalized patients for the period January 2021-June 2023. Data was also collected through interviews with pharmacists to find out their role in dose adjustment. Dose adjustment was calculated based on estimated creatinine clearance using the Cockcroft-Gault and GFR values using the MDRD formula. The relationship between dose adjustment and therapy outcome was analyzed using Chi-square.

The results showed that there were 83 patients with 90 inpatient cases. There were 339 antihypertensives used, with amlodipine being the most commonly used (72.2%). Total of 177 drugs (52.2%) required dose adjustment and these drugs, 158 drugs (89.3%) were given at appropriate doses and 19 drugs (10.7%) at inappropriate doses. There were 70 cases (77.8%) with improved therapeutic outcomes and 20 cases (22.2%) with unimproved therapeutic outcomes. The chi-square test showed no association between antihypertensive dose adjustment and therapeutic outcome in patients hospitalized with CKD (OR 2,259, 95% CI = 0,660-7,734, p-value = 0,291). Clinical pharmacists play an important role in managing dose adjustment to improve patient care and prevent adverse events.

Keywords: *chronic kidney disease, dose adjustment, antihypertensive, therapeutic outcome*