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Drug Use Evaluation of Anemia Therapy and Therapeutic Outcome in Chronic Kidney Disease Outpatients Undergoing Hemodialysis at the RSA UGM
Faizah Amalia, Dr. apt. Fita Rahmawati, Sp. FRS.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

INTISARI

Anemia merupakan salah satu komplikasi terbanyak pada penyakit ginjal kronik (PGK), terutama pada pasien yang menjalani hemodialisis rutin, serta berkontribusi terhadap peningkatan morbiditas dan penurunan kualitas hidup. Evaluasi Penggunaan Obat diperlukan untuk menilai kesesuaian terapi dengan pedoman praktik klinis serta mengevaluasi luaran terapi. Penelitian ini bertujuan untuk mendeskripsikan karakteristik demografis dan klinis pasien PGK dengan anemia yang menjalani hemodialisis, menentukan persentase rasionalitas terapi anti-anemia berdasarkan Pedoman Nasional Pelayanan Kedokteran (PNPK) Tahun 2023, serta mengevaluasi pencapaian target kadar hemoglobin terapeutik. Penelitian deskriptif kuantitatif dengan desain cross-sectional *retrospektif ini menggunakan data rekam medis pasien PGK dewasa yang menjalani hemodialisis rawat jalan di* Rumah Sakit Akademik Universitas Gadjah Mada *pada periode Agustus 2024 hingga Desember 2025. Sampel diperoleh menggunakan teknik* consecutive sampling *sebanyak 80 pasien.*

Evaluasi Penggunaan Obat dilakukan berdasarkan PNPK 2023 dengan menilai ketepatan indikasi, ketepatan obat, ketepatan dosis, dan ketepatan pasien. Sebagian besar pasien berjenis kelamin laki-laki (57,50%) dan berusia 45–64 tahun (61,25%). Terapi kombinasi merupakan pola terapi yang paling banyak digunakan (78,8%), dengan kombinasi erythropoiesis-stimulating agent*,* iron sucrose *intravena, dan asam folat sebagai regimen yang paling sering diresepkan. Secara keseluruhan, 76,25% pasien menerima terapi anti-anemia yang rasional.*

Persentase ketepatan berdasarkan kriteria evaluasi penggunaan obat *adalah 100% untuk tepat indikasi, 91,25% tepat obat, 85,00% tepat dosis, dan 100% tepat pasien. Kadar hemoglobin meningkat pada 68,75% pasien, dengan rerata hemoglobin meningkat dari 8,83 ± 1,27 g/dL menjadi 9,33 ± 1,46 g/dL. Namun, hanya 7,50% pasien yang mencapai target hemoglobin terapeutik sebesar 10–12 g/dL. Dengan demikian, terapi kombinasi merupakan pola terapi yang paling dominan, sebagian besar terapi telah sesuai dengan rekomendasi PNPK 2023, dan meskipun kadar hemoglobin umumnya meningkat selama masa observasi, pencapaian target hemoglobin terapeutik masih terbatas.*

Kata kunci: *terapi anemia, penyakit ginjal kronik, evaluasi penggunaan obat, hemodialisis, luaran terapeutik.*

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ABSTRACT

Anemia is one of the most common complications of chronic kidney disease (CKD), particularly among patients undergoing maintenance hemodialysis, and is associated with increased morbidity and reduced quality of life. Appropriate management of CKD-related anemia requires Drug Use Evaluation (DUE) to assess adherence to clinical practice guidelines and to evaluate therapeutic outcomes. This study aimed to describe the demographic and clinical characteristics of anemic CKD patients undergoing hemodialysis, determine the percentage of rational anti-anemia therapy based on the 2023 *Pedoman Nasional Pelayanan Kedokteran* (PNPK), and evaluate the achievement of target therapeutic hemoglobin levels.

This descriptive quantitative study employed a retrospective, cross-sectional design using medical records of adult CKD outpatients undergoing maintenance hemodialysis at Rumah Sakit Akademik Universitas Gadjah Mada between August 2024 and December 2025. Consecutive sampling yielded 80 eligible patients. Drug Use Evaluation was performed according to the PNPK 2023 guideline, including assessment of correct indication, correct drug, correct dose, and correct patient. Most patients were male (57.50%) and aged 45–64 years (61.25%). Combination therapy predominated (78.8%), with erythropoiesis-stimulating agents, intravenous iron sucrose, and folic acid being the most frequently prescribed regimen. Overall, 76.25% of patients received rational anti-anemia therapy.

The proportions meeting the DUE criteria were 100% for correct indication, 91.25% for correct drug, 85.00% for correct dose, and 100% for correct patient. Hemoglobin levels increased in 68.75% of patients, with mean hemoglobin rising from 8.83 ± 1.27 g/dL before therapy to 9.33 ± 1.46 g/dL after observation. However, only 7.50% of patients achieved the recommended therapeutic hemoglobin target of 10–12 g/dL. In conclusion, combination anti-anemia therapy was the predominant treatment approach, most patients received therapy consistent with PNPK 2023 recommendations, and although hemoglobin levels generally improved during follow-up, achievement of the recommended therapeutic target remained limited.

Key word: *anemia therapy, chronic kidney disease, drug use evaluation, hemodialysis, therapeutic outcome.*