

EVALUASI TERAPI DIURETIK TERHADAP *CLINICAL OUTCOME* PASIEN AKI (*ACUTE KIDNEY INJURY*) PRERENAL RAWAT INAP di RSUP Dr. M. DJAMIL PADANG

ABSTRAK

Acute Kidney Injury (AKI) merupakan penyakit yang ditandai dengan penurunan fungsi ginjal secara tiba-tiba. Terapi yang tepat dapat mempengaruhi kualitas hidup dan memperkecil angka kematian pasien. Penelitian ini bertujuan untuk mengevaluasi dampak terapi diuretik terhadap *clinical outcome* pasien AKI prerenal rawat inap di RSUP Dr. M. Djamil Padang Januari–Desember tahun 2023–2024. *clinical outcome* yang diamati adalah nilai BUN, kadar natrium, kalium, kreatinin serum, serta lama rawat. Variabel independen yang diamati adalah obat diuretik, kelompok usia, jenis kelamin dan stadium AKI. Penelitian ini deskriptif kuantitatif dengan metode *cross-sectional*. Data yang diambil adalah rekam medik elektronik pasien AKI prerenal di rawat inap RSUP Dr. M. Djamil tahun 2023 dan 2024 yang memenuhi kriteria inklusi. Data dianalisis menggunakan metoda ANCOVA dan uji T berpasangan. Hasil penelitian menunjukkan bahwa obat diuretik maupun tidak ada obat diuretik berpengaruh nyata ($p < 0,1$) terhadap perubahan nilai BUN. Parameter kelompok usia baik remaja, dewasa, dan lansia berpengaruh nyata ($p < 0,1$) terhadap perubahan nilai BUN. Parameter jenis kelamin baik pria maupun wanita tidak berpengaruh nyata ($p > 0,1$) terhadap *clinical outcome*. Parameter stadium AKI baik stadium 1, stadium 2, maupun stadium 3 berpengaruh nyata ($p < 0,1$) terhadap perubahan nilai BUN dan nilai kreatinin serum. Dapat disimpulkan bahwa terapi diuretik dapat memberikan perbaikan *clinical outcome* pasien AKI prerenal, namun diperlukan pertimbangan faktor usia dan stadium AKI dalam pengelolaan terapi yang optimal.

Kata Kunci: *Acute Kidney Injury*, diuretik, BUN, elektrolit, *clinical outcome*

Evaluation of Diuretic Therapy on *Clinical Outcomes* in Patients with Prerenal *Acute Kidney Injury* (AKI) Hospitalized at Dr. M. Djamil General Hospital, Padang

ABSTRACT

Acute Kidney Injury (AKI) is a condition characterized by a sudden decline in kidney function. Appropriate therapy can improve quality of life and reduce mortality rates among patients. This study aims to evaluate the impact of diuretic therapy on *clinical outcomes* in hospitalized patients with prerenal AKI at Dr. M. Djamil General Hospital, Padang, from January to December 2023–2024. The clinical outcomes observed include blood urea nitrogen (BUN) levels, sodium and potassium levels, serum creatinine levels, and length of stay. The independent variables observed were diuretic medication, age group, gender, and AKI stage. This study is a quantitative descriptive study using a cross-sectional method. The data collected were electronic medical records of pre-renal AKI patients hospitalized at Dr. M. Djamil General Hospital in 2023 and 2024 who met the inclusion criteria. Data were analyzed using ANCOVA and paired t-tests. The results showed that both diuretic medications and the absence of diuretic medications had a significant effect ($p < 0,1$) on changes in BUN levels. Age group parameters, including adolescents, adults, and the elderly, had a significant effect ($p < 0,1$) on changes in BUN levels. Gender parameters, including both men and women, did not have a significant effect ($p > 0,1$) on *clinical outcomes*. The AKI stage parameter, including stage 1, stage 2, and stage 3, had a significant effect ($p < 0,1$) on changes in BUN and serum creatinine levels. It can be concluded that diuretic therapy can improve clinical outcomes in patients with prerenal AKI; however, age and AKI stage must be considered for optimal therapy management.

Keywords: *Acute Kidney Injury*, diuretic, BUN, electrolytes, *clinical outcome*