

## ABSTRAK

Gagal ginjal kronik (CKD) ialah fungsi ginjal yang menurun secara ireversibel dan progresif yakni ketidakmampuan ginjal mempertahankan keseimbangan metabolisme, cairan dan elektrolit, oleh sebab itu memicu peningkatan azotemia dan uremia. Tujuan dari studi ini yaitu guna mengetahui kadar asam urat, kreatinin dan ureum pada pasien gagal ginjal kronik sesudah dan sebelum hemodialisis di RS Lavalette Malang. Studi ini memakai jenis penelitian kuantitatif komparatif lewat pendekatan *cross sectional*. Studi ini diselenggarakan pada 27 April – 1 Mei 2024 dengan total sampel sebanyak 37 pasien gagal ginjal kronik di RS Lavalette Malang. Pemeriksaan asam urat, kreatinin dan ureum dilakukan dengan alat Mindray BS-220E. Untuk pasien gagal ginjal kronik pemeriksaan kadar asam urat diperoleh nilai rata-rata sebelum hemodialisis 8,28 mg/dl dan sesudah hemodialisis 2,00 mg/dl. Pemeriksaan kadar kreatinin pada pasien gagal ginjal kronik didapatkan nilai rata-rata sebelum hemodialisis 11,75 mg/dl dan sesudah hemodialisis 3,92 mg/dl. Pemeriksaan kadar ureum pada pasien gagal ginjal kronik didapatkan nilai rata-rata sebelum hemodialisis 114,6 mg/dl dan sesudah hemodialisis 46,10 mg/dl. Ada hal yang berbeda diantara kadar asam urat, kreatinin dan ureum pada pasien gagal ginjal kronik sesudah dan sebelum hemodialisis.

**Kata kunci:** Asam Urat, Kreatinin, Ureum, Hemodialisis, Gagal Ginjal Kronik

## **ABSTRACT**

*Chronic Kidney Disease (CKD) is a decline in kidney function that is irreversible and progressive, characterized by the kidneys' inability to regulate metabolic balance, fluids, and electrolytes. This leads to an increase in azotemia and uremia. The aim of this research is to determine the levels of uric acid, creatinine, and urea in chronic kidney failure patients before and after hemodialysis at Lavalette Hospital Malang. This research uses a comparative quantitative research type with a cross-sectional approach. This research was conducted from April 27 to May 1, 2024, with a total sample of 37 chronic kidney failure patients at Lavalette Hospital Malang. The examination of uric acid, creatinine, and urea was conducted using the Mindray BS-220E device. The examination of uric acid levels in patients with chronic kidney failure showed an average value of 8.28 mg/dl before hemodialysis and 2.00 mg/dl after hemodialysis. The examination of creatinine levels in patients with chronic kidney failure showed an average value of 11.75 mg/dl before hemodialysis and 3.92 mg/dl after hemodialysis. The examination of urea levels in patients with chronic kidney failure shows an average value of 114.6 mg/dl before hemodialysis and 46.10 mg/dl after hemodialysis. There is a difference in the levels of uric acid, creatinine, and urea in chronic kidney failure patients before and after hemodialysis.*

**Keywords:** Uric Acid, Creatinine, Urea, Hemodialysis, Chronic Kidney Failure