

## INTISARI

**Dewi, A.I.R. 2022. *Perbedaan Kadar Kreatinin, Ureum dan Kalium pada Pasien Gagal Ginjal Kronis Sebelum dan Sesudah Hemodialisis di RSUD Dr. Moewardi Surakarta*. Skripsi. Program Studi D4 Analis Kesehatan, Fakultas Ilmu Kesehatan, Universitas Setia Budi.**

Gagal Ginjal Kronis (GGK) merupakan masalah kesehatan utama di seluruh dunia yang dibuktikan dengan peningkatan angka morbiditas, mortalitas, serta peningkatan tindakan hemodialisis setiap tahunnya. Peningkatan kadar kreatinin, ureum dan kalium dalam darah mengindikasikan adanya penurunan fungsi ginjal. Hemodialisis merupakan salah satu terapi pengganti fungsi ginjal dengan membuang zat-zat dengan kadar berlebih seperti kreatinin, ureum dan kalium pada pasien GGK. Penelitian ini bertujuan untuk mengetahui perbedaan kadar kreatinin, ureum dan kalium pada pasien GGK sebelum dan sesudah hemodialisis.

Penelitian ini menggunakan desain penelitian observasional analitik dengan pendekatan *cross-sectional study*. Bahan penelitian berupa data sekunder dengan total subjek sebanyak 36 sampel pasien GGK yang menjalani hemodialisis. Penelitian dilakukan pada bulan Maret – Agustus 2022 di RSUD Dr. Moewardi Surakarta. Analisis data dilakukan dengan uji normalitas *Shapiro-Wilk* dan dilanjutkan dengan uji statistik *Paired Sample T Test* dan uji *Wilcoxon* dengan  $p < 0,05$ .

Hasil uji *Wilcoxon* kadar kreatinin pada pasien GGK sebelum dan sesudah hemodialisis didapatkan hasil  $p = 0,000$  ( $p < 0,05$ ) sedangkan hasil uji statistik *Paired Sample T Test* kadar ureum dan kalium pada pasien GGK sebelum dan sesudah hemodialisis didapatkan hasil masing-masing  $p = 0,000$  dan  $p = 0,000$  ( $p < 0,05$ ). Dapat disimpulkan bahwa terdapat perbedaan kadar kreatinin, ureum dan kalium pada pasien GGK sebelum dan sesudah hemodialisis, yaitu terjadi penurunan kadar kreatinin, ureum dan kalium pada pasien GGK sesudah dilakukan terapi hemodialisis.

Kata kunci: gagal ginjal kronis, hemodialisis, kreatinin, ureum, kalium

## ABSTRACT

**Dewi, A.I.R. 2022. *The Differences between Creatinine, Urea, and Potassium Levels in Patients with Chronic Kidney Disease Before and After Hemodialysis in RSUD Dr. Moewardi Surakarta*. Skripsi. Bachelor's degree Program in Medical Laboratory Technology, Faculty of Health Sciences, Setia Budi University.**

Chronic Kidney Disease (CKD) is a major health problem worldwide as evidenced by the increase in morbidity, mortality and increased hemodialysis actions every year. Increased levels of creatinine, urea and potassium in the blood indicate a decrease in kidney function. Hemodialysis is a replacement therapy for kidney function by removing substances with excess levels such as creatinine, urea and potassium in CKD patients. This study aims to determine differences in creatinine, urea and potassium levels in CKD patients before and after hemodialysis.

This study uses an analytical observational research design with a cross-sectional study approach. The research material is secondary data with a total of 36 samples of CKD patients undergoing hemodialysis. The study was conducted in March – August 2022 at RSUD Dr. Moewardi Surakarta. Data analysis was performed using the Shapiro-Wilk normality test and continued with the Paired Sample T Test and the Wilcoxon test with  $p < 0.05$ .

The results of the Wilcoxon test for creatinine levels in CKD patients before and after hemodialysis were obtained and  $p = 0.000$  ( $p < 0.05$ ) while the results of the Paired Sample T Test statistical test for urea and potassium levels in CKD patients before and after hemodialysis showed that each  $p = 0.000$  and  $p = 0.000$  ( $p < 0.05$ ). It can be concluded that there are differences in creatinine, urea and potassium levels in CKD patients before and after hemodialysis, namely a decrease in creatinine, urea and potassium levels in CKD patients after hemodialysis therapy.

**Keywords:** chronic kidney disease, hemodialysis, creatinine, urea, potassium