

## ABSTRACT

**Background:** Chronic Kidney Disease (CKD) is a process of kidney damage over a period of more than three months. Chronic kidney disease can cause symptoms, that is the glomerular filtration rate is below  $60 \text{ ml/min}/1.73 \text{ m}^2$  or above this value accompanied by abnormalities of urine sediment. Patients with chronic kidney failure can experience protein loss through urine, causing a decrease in serum albumin or hypoalbuminemia. Low serum albumin level is an important indicator of morbidity and mortality. A person suffering from kidney damage can be helped with kidney replacement therapy, namely hemodialysis.

**Objective:** To determine differences in albumin levels in patients with Chronic Kidney Failure before and after Hemodialysis

**Method:** This study was an observational cross-sectional design. The study was conducted in March - April 2020. The population in this study were patients with chronic kidney failure who underwent hemodialysis in the hemodialysis room at Bethesda Hospital in Yogyakarta with 25 respondents. Data analysis using Paired Sample T-test.

**Results:** The mean albumin level in pre hemodialysis patients was 3.8 g/dL and the mean albumin level in post hemodialysis patients was 4.3 g/dL. The results showed a difference in albumin levels in patients with chronic renal failure pre and post hemodialysis (Asymp sig = 0,000).

**Conclusion:** There are differences in albumin levels in patients with chronic renal failure pre and post hemodialysis in the hemodialysis room at Bethesda Hospital Yogyakarta.

**Keywords:** Chronic Kidney Disease, Albumin, Hemodialysis

## ABSTRAK

**Latar Belakang :** Gagal Ginjal Kronis (GGK) merupakan proses kerusakan ginjal selama rentang waktu lebih dari tiga bulan. Gagal ginjal kronis dapat menimbulkan simtoma, yaitu laju filtrasi glomerular berada di bawah  $60 \text{ ml/menit}/1,73 \text{ m}^2$  atau di atas nilai tersebut yang disertai dengan kelainan sedimen urine. Pasien gagal ginjal kronis dapat mengalami kehilangan protein melalui urin sehingga menyebabkan terjadinya penurunan kadar albumin serum atau hipoalbuminemia. Kadar serum albumin rendah merupakan indikator penting dari mordibitas dan mortalitas. Seseorang yang menderita kerusakan ginjal dapat dibantu dengan terapi pengganti ginjal yaitu hemodialisa.

**Tujuan :** Mengetahui perbedaan kadar albumin pada pasien Gagal Ginjal Kronis *pre* dan *post* Hemodialisa

**Metode :** Penelitian ini adalah Observasional dengan rancangan *cross sectional*. Penelitian dilaksanakan pada bulan Maret – April 2020. Populasi pada penelitian ini merupakan pasien gagal ginjal kronis yang menjalani hemodialisa di ruang hemodialisa RS Bethesda Yogyakarta dengan 25 responden. Analisis data menggunakan *Paired Sample T-test*.

**Hasil :** Rerata kadar albumin pada pasien pre hemodialisa adalah 3.8 g/dL dan rerata kadar albumin pada pasien post hemodialisa adalah 4.3 g/dL. Hasil penelitian menunjukkan adanya perbedaan kadar albumin pada pasien gagal ginjal kronis pre dan post hemodialisa (*Asymp sig* = 0,000).

**Kesimpulan :** Ada perbedaan kadar albumin pada pasien gagal ginjal kronis pre dan post hemodialisa di ruang hemodialisa RS Bethesda Yogyakarta.

**Kata Kunci :** Gagal Ginjal Kronis, Albumin, Hemodialisis