

## PERBEDAAN KADAR PROTEIN TOTAL PADA PASIEN GAGAL GINJAL KRONIS PRE DAN POST HEMODIALISA DI RUANG HEMODIALISA RS BETHESDA YOGYAKARTA

Ainaya Nurfadila Hakim, Anik Nuryati, Zulfikar Husni Faruq  
Jurusan Analis Kesehatan Poltekkes Kemenkes Yogyakarta  
Jl. Ngadinegaran MJ III/62 Yogyakarta, Telp: (0274)374200  
email : [ainaya.nurfadila@gmail.com](mailto:ainaya.nurfadila@gmail.com)

### ABSTRAK

**Latar Belakang :** Gagal ginjal merupakan sebuah gangguan fungsi renal yang berjalan progresif dan *irreversible*. Pada penderita gagal ginjal, karena kebocoran protein plasma ke urine, dapat mengakibatkan kadar protein pada darah menjadi rendah. Gagal ginjal pada kondisi yang berat dan tidak dapat teratasi hanya dengan perawatan atau diet khusus, memerlukan tindakan hemodialisa. Hemodialisa diharapkan dapat menggantikan fungsi ginjal yang telah rusak dan menekan pengeluaran protein pada pasien melalui urine sehingga gambaran kadar protein serum pasien juga dapat membaik.

**Tujuan Penelitian :** Mengetahui apakah terdapat perbedaan kadar protein total pada pasien gagal ginjal kronis *pre* dan *post* hemodialisa serta mengetahui rerata kadar protein total pada pasien gagal ginjal kronis pada *pre* dan *post* hemodialisa.

**Metode Penelitian :** Jenis penelitian yang digunakan dalam penelitian ini adalah observasi dengan desain *cross sectional*. Penelitian dilakukan selama bulan Maret-April 2020 dengan populasi pasien Gagal Ginjal Kronis yang menjalani hemodialisa dan total jumlah responden sebanyak 25

**Hasil Penelitian :** Dari data 25 responden, didapatkan hasil 48% pasien mengalami peningkatan kadar protein setelah dilakukan hemodialisa. Dan 52% pasien mengalami penurunan kadar. Rerata kadar protein total pada pasien gagal ginjal kronis sebelum hemodialisa adalah 7,59 g/dL dan rerata kadar protein total sesudah hemodialisa adalah 7,75 g/dL. Meskipun demikian, hasil tidak menunjukkan adanya perbedaan setelah dilakukan analisa statistik dengan nilai signifikansi *paired t-test* 0,507 ( $p < 0,05$ )

**Kesimpulan :** Tidak terdapat perbedaan kadar protein total pada pasien gagal ginjal kronis *pre* dan *post* hemodialisa di Ruang Hemodialisa RS Bethesda Yogyakarta. Rerata kadar protein total pada pasien gagal ginjal kronis sebelum hemodialisa adalah 7,59 g/dL dan rerata kadar protein total sesudah hemodialisa adalah 7,75 g/dL.

Kata kunci : Kadar Protein Total, Gagal Ginjal Kronis, Hemodialisa

**THE DIFFERENCE IN TOTAL PROTEIN LEVELS ON PATIENT WITH  
CHRONICAL KIDNEY DISEASE PRE AND POST HEMODIALYSIS  
TREATMENT IN HEMODIALYSIS ROOM AT BETHESDA  
YOGYAKARTA HOSPITAL**

Ainaya Nurfadila Hakim, Anik Nuryati, Zulfikar Husni Faruq  
Medical Laboratory Technology Poltekkes Kemenkes Yogyakarta  
Ngadinegaran Street MJ III/62 Yogyakarta, Telp: (0274)374200  
email : [ainaya.nurfadila@gmail.com](mailto:ainaya.nurfadila@gmail.com)

**ABSTRACT**

**Background :** Renal failure is a kidneys' damage that's going progressive and irreversible. On patient with chronic kidney disease, because of protein that pass through urine, it causing the total protein levels on bloods become low. Kidney failure in a serious condition that can't be resolved just with general treatment or certain diet, need a hemodialysis treatment. Hemodialysis were expected can replacing the damage kidney's function and hold the protein's loss from urine so that the total protein levels in serum become better.

**Objective :** To determine the difference in protein total's levels on patients with Chronic Kidney Disease pre and post hemodialysis treatment. Also determine the average levels of total protein before and after hemodialysis treatment.

**Method :** This study was an observational cross-sectional design. Was conducted in March until April 2020. Population of this study were patients with chronic kidney disease who having hemodialysis treatment on Bethesda Hospital in Yogyakarta with 25 respondent.

**Result :** From 25 respondent, the result is 48% patients' total protein levels increased, and 52% patients' total protein levels decreased. The average of total protein levels in pre hemodialysis was 7,59 g/dL and average of total protein levels in post hemodialysis was 7,75 g/dL. Although the result showed there's no difference after its analyzed with statistic with significant score *paired t-test* 0,507 ( $p < 0,05$ ).

**Conclusion :** There's no differences in total protein levels on patients with Chronic Kidney Disease pre and post hemodialysis treatment in the hemodialysis room at Bethesda Hospital Yogyakarta. The average of total protein levels in pre hemodialysis was 7,59 g/dL and average of total protein levels in post hemodialysis was 7,75 g/dL.

Keyword : Total Protein, Chronic Kidney Disease, Hemodialysis