

INTISARI

Anjani, G. 2025. Perbedaan Kadar Glukosa Darah Pada Pasien Pre Dan Post Hemodialisis Di Rumah Sakit UNS Surakarta. Program Studi D4 Analis Kesehatan, Fakultas Ilmu Kesehatan, Universitas Setia Budi.

Hemodialisis merupakan metode penggantian fungsi ginjal untuk menyaring darah, terutama pada pasien dengan Gagal Ginjal Kronik (GGK). Salah satu komplikasi yang sering terjadi pada pasien hemodialisis adalah perubahan kadar glukosa darah. Penelitian ini bertujuan untuk mengetahui perbedaan kadar glukosa darah sebelum dan sesudah hemodialisis pada pasien di Rumah Sakit UNS Surakarta.

Penelitian ini menggunakan desain observasional analitik dengan pendekatan *cross sectional*. Waktu yang dilakukan pada bulan Februari hingga April 2025, besar populasi sebanyak 78 responden yang dipilih dengan teknik *simple random sampling*. Data kadar glukosa diukur menggunakan metode POCT (*Point of Care Testing*) sebelum dan sesudah hemodialisis. Teknik analisis data menggunakan uji statistik *kolmogorov smirnov* dan dilanjutkan uji beda yang digunakan *Mann-Whitney*.

Hasil uji menunjukkan terdapat perbedaan kadar glukosa darah antara *pre* dan *post* hemodialisis. Nilai rerata kadar glukosa darah sebelum hemodialisis adalah 157 ± 80 mg/dL dan setelah hemodialisis menurun menjadi $125,5 \pm 38$ mg/dL. Didapatkan hasil uji normalitas (*Kolmogorov Smirnov*) pada kadar glukosa darah *pre* HD *p-value* sebesar 0,001 dan kadar glukosa darah *post* HD *p-value* sebesar 0,037 data dikatakan tidak berdistribusi normal dan dilanjutkan uji beda menggunakan (*Mann-Whitney*) didapatkan hasil *p-value* kadar glukosa darah *pre* dan *post* HD sebesar 0,038 maka hipotesis dapat diterima. Dari penelitian ini dapat disimpulkan terdapat perbedaan yang bermakna pada kadar glukosa darah pasien *pre* dan *post* hemodialisis di RS UNS Surakarta. Penurunan kadar glukosa ini dapat disebabkan oleh proses difusi glukosa ke dalam cairan dialisis selama hemodialisis. Oleh karena itu, pemantauan kadar glukosa darah secara rutin pada pasien hemodialisis sangat diperlukan untuk mencegah komplikasi seperti hipoglikemia.

Kata Kunci: Glukosa Darah, *Pre* Hemodialisis, *Post* Hemodialisis

ABSTRACT

Anjani, G. 2025. *Differences in Blood Glucose Levels in Pre- and Post-Hemodialysis Patients at UNS Surakarta Hospital*. D4 Health Analyst Study Program, Faculty of Health Sciences, Setia Budi University.

Hemodialysis is a kidney replacement therapy used to filter the blood, particularly in patients with Chronic Kidney Disease (CKD). One of the common complications in hemodialysis patients is a change in blood glucose levels. This study aims to determine the difference in blood glucose levels before and after hemodialysis in patients at UNS Hospital Surakarta.

This study used an analytical observational design with a cross-sectional approach. The research was conducted from February to April 2025, involving a population of 78 respondents selected using a simple random sampling technique. Blood glucose levels were measured using the POCT (Point of Care Testing) method before and after hemodialysis. Data analysis was performed using the Kolmogorov-Smirnov statistical test, and the Mann-Whitney test is used as the follow-up comparative test.

The test results showed a difference in blood glucose levels between pre- and post-hemodialysis. The mean blood glucose level before hemodialysis was 157 ± 80 mg/dL, which decreased to 125.5 ± 38 mg/dL after hemodialysis. The normality test (Kolmogorov-Smirnov) showed a p-value of 0.001 for pre-hemodialysis blood glucose levels and 0.037 for post-hemodialysis, indicating that the data were not normally distributed. Therefore, a non-parametric test (Mann-Whitney) was used, yielding a p-value of 0.038 for the difference in blood glucose levels before and after hemodialysis, which supports the hypothesis. Based on this study, it can be concluded that there is a significant difference in blood glucose levels between pre- and post-hemodialysis patients at UNS Hospital Surakarta. The decrease in glucose levels may be due to the diffusion of glucose into the dialysate fluid during the hemodialysis process. Therefore, routine monitoring of blood glucose levels in hemodialysis patients is essential to prevent complications such as hypoglycemia.

Keywords: Blood Glucose, Pre Hemodialysis, Post Hemodialysis