

## INTISARI

**Pallai, M, H. 2024. Hubungan Kadar Glukosa Darah Puasa dengan Proteinuria pada Pasien Nefropati Diabetik. Program Studi D4 Analisis Kesehatan, Fakultas Ilmu Kesehatan, Universitas Setia Budi.**

Nefropati diabetik merupakan kerusakan ginjal akibat diabetes melitus (DM), ditandai adanya protein dalam urine (proteinuria) sekitar 40% pasien DM tipe 1 serta 2 mengalaminya. Pemeriksaan kadar glukosa darah puasa (GDP) merupakan indikator kontrol glikemik yang buruk. Kadar GDP yang tidak kontrol menyebabkan kerusakan pada ginjal ditandai adanya protein dalam urin. Studi ini berfokus untuk mengeksplor hubungan kadar glukosa darah puasa dengan proteinuria di pasien nefropati diabetik di RSUD Dr. Moewardi Surakarta.

Studi yang dilaksanakan pada Desember 2023 hingga Juni 2024 ini menggunakan desain analitis observasional cross-sectional. Sembilan puluh pasien dengan nefropati diabetik yang menjalani PDB dan tes protein urin membentuk sampel. Total sampling adalah metode pengambilan sampel yang digunakan. PDB dan hasil tes protein urin—khususnya, data sekunder yang dikumpulkan dari rekam medis pasien—menjadi dasar untuk pengumpulan data. Uji *Chi-square* adalah teknik analisis data yang digunakan.

Temuan evaluasi data yang digunakan dengan uji *Chi-Square*, menunjukkan kadar GDP rendah dengan protein +1 sebanyak 3 responden (3,3%), sedangkan dengan protein +2, +3 dan +4 tidak ditemukan. Kadar GDP normal dengan protein +1 diperoleh 8 responden (9,8%), protein +2 diperoleh 16 responden (17,8%), protein +3 diperoleh 3 responden (3,3%) dan protein +4 tidak ditemukan. Pada kadar GDP tinggi diperoleh protein +1 sebanyak 6 responden (6,7%), protein +2 sebanyak 18 responden (20%), protein +3 sejumlah 31 responden (34,4%), dan protein +4 sejumlah 5 responden (5,6%). Temuan penelitian di RSUD Dr. Moewardi Surakarta menunjukkan korelasi yang kuat ( $p = 0,001 < 0,05$ ) antara kadar glukosa darah puasa dan proteinuria pada individu dengan nefropati diabetik.

**Kata Kunci: Proteinuria, Glukosa Darah Puasa, Nefropati Diabetik**

## ABSTRACT

**Pallai, M, H. 2024. Correlation between Fasting Blood Glucose Levels and Proteinuria in Diabetic Nephropathy patients at RSUD Dr. Moewardi Surakarta. D4 Health Analyst Study Program, Faculty of Health Sciences, Setia Budi University.**

Diabetic nephropathy is kidney damage due to diabetes mellitus (DM), characterized by the presence of protein in the urine (proteinuria) around 40% of DM type 1 and 2 patients experience it. Fasting blood glucose (GDP) levels are an indicator of poor glycemic control. Uncontrolled GDP levels cause damage to the kidneys marked by the presence of protein in the urine. This study focused on exploring the relationship between fasting blood glucose levels and proteinuria in diabetic nephropathy patients at Dr. Moewardi Hospital Surakarta.

The study, which was carried out from December 2023 to June 2024, used a cross-sectional observational analytical design. Ninety patients with diabetic nephropathy who underwent PDB and urine protein tests formed a sample. Total sampling is the sampling method used. GDP and urine protein test results—specifically, secondary data collected from patients' medical records—form the basis for data collection. The *Chi-square* test is a data analysis technique used.

The findings of the data evaluation used with the Chi-Square test, showed that the GDP level was low with +1 proteins as many as 3 respondents (3.3%), while with +2, +3 and +4 proteins were not found. Normal GDP levels with +1 protein were obtained by 8 respondents (9.8%), +2 protein was obtained by 16 respondents (17.8%), +3 protein was obtained by 3 respondents (3.3%) and +4 protein was not found. At high GDP levels, 6 respondents (6.7%) obtained +1 protein, 18 respondents (20%) +2 protein, 31 respondents (34.4%) +3 protein, and 5 respondents (5.6%) +4 protein. The findings of the study at Dr. Moewardi Surakarta Hospital showed a strong correlation ( $p = 0.001 < 0.05$ ) between fasting blood glucose levels and proteinuria in individuals with diabetic nephropathy.

**Keywords: Proteinuria, Fasting Blood Glucose, Diabetic Nephropathy**