# ABSTRAK

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KORELASI ANTARA HBA1C DENGAN KADAR KREATININ PADA PENDERITA DIABETES MELITUS DISERTAI HIPERTENSI
P27834124161
xvi + 63 Halaman + 16 Tabel + 16 Gambar + 11 Lampiran

Diabetes melitus ialah gangguan metabolik kronis dengan karakteristik hiperglikemia. Kondisi ini mampu memicu komplikasi mikrovaskuler seperti nefropati diabetik. Nefropati diabetik terjadi akibat kondisi glukosa darah yang tidak teratur memaksa ginjal bekerja lebih intensif selama penyaringan darah. Penurunan fungsi ginjal dapat dikenali melalui peningkatan konsentrasi ureum dan kreatinin dalam sirkulasi darah. Oleh karena itu, studi ini bertujuan guna meninjau keterkaitan antara kadar HbA1c dan kreatinin pada pengidap diabetes melitus dengan hipertensi. Studi ini tergolong observasional analitik berbasis *purposive sampling* di UPTD Laboratorium Kesehatan Daerah Kabupaten Magetan. Penelitian ini melibatkan 88 orang pasien diabetes melitus yang juga mengalami hipertensi, yang tercatat dalam Program Pengelolaan Penyakit Kronis (Prolanis) di salah satu Puskesmas di wilayah Kabupaten Magetan selama pada bulan Januari-April 2025. Pemeriksaan HbA1c dilakukan menggunakan metode *Fluorescent Immunoassay* (FIA), sedangkan kadar kreatinin diukur dengan metode *Jaffe*. Uji statistik korelasi *Spearmen* diterapkan dalam studi ini. Berdasarkan hasil yang diperoleh, ditemukan hubungan bermakna dengan tingkat keterkaitan positif sedang antara HbA1c dan kadar kreatinin pada pengidap diabetes melitus disertai hipertensi.

**Kata kunci**: HbA1c, kreatinin, diabetes melitus, hipertensi, nefropati diabetik.
Daftar bacaan: 6 buku (2017 – 2023)

## *ABSTRACT*

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*CORRELATION BETWEEN HBA1C AND CREATININE LEVELS IN PATIENTS WITH DIABETES MELLITUS ACCOMPANIED WITH HYPERTENSION*
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xvi + 63 *Pages* + 16 *Tables* + 16 *Figures* + 11 *Appendices*

*Diabetes mellitus is a chronic metabolic disease characterized by hyperglycemia. This condition can lead to microvascular complications such as diabetic nephropathy. Diabetic nephropathy occurs due to irregular blood glucose levels, forcing the kidneys to work harder in the blood filtration process. Decreased kidney function can be recognized by increasing the concentration of urea and creatinine in the blood circulation. Therefore, this study aims to analyze the relationship between HbA1c and creatinine levels in diabetes mellitus patients who also have hypertension. This study used an observational analytical design with a purposive sampling method at the Regional Health Laboratory UPTD of Magetan Regency. This study involved* 88 *diabetes mellitus patients who also had hypertension, who were members of the Chronic Disease Management Program (Prolanis) at one of the Community Health Centers in Magetan Regency from January to April* 2025. *HbA1c examinations were performed using the Fluorescent Immunoassay (FIA) method, while creatinine levels were measured using the Jaffe method. Statistical analysis in this study used the Spearman nonparametric correlation test. Based on the results obtained, a significant relationship with a moderate positive correlation level was found between HbA1c and creatinine levels in patients with diabetes mellitus accompanied by hypertension.*



***Keywords****: HbA1c, creatinine, diabetes mellitus, hypertension, diabetic nephropathy.*
*Reference:* 15 *books* (2017 - 2023)