HUBUNGAN KADAR KREATININ DENGAN NILAI HEMOGLOBIN PADA PASIEN PENYAKIT GINJAL KRONIK DI RUMAH SAKIT UMUM DAERAH (RSUD) KABUPATEN BULELENG TAHUN 2024

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ABSTRAK

Penyakit Ginjal Kronik (PGK) merupakan gangguan progresif pada ginjal yang sering menimbulkan komplikasi anemia akibat penurunan produksi eritropoietin. Penelitian ini bertujuan menganalisis hubungan kadar kreatinin dengan nilai hemoglobin pada pasien PGK di RSUD Kabupaten Buleleng tahun 2024. Penelitian menggunakan desain analitik korelasional dengan pendekatan *cross-sectional*. Sampel terdiri dari 44 pasien PGK rawat jalan yang dipilih melalui teknik *purposive sampling* sesuai kriteria inklusi dan eksklusi. Data diperoleh dari rekam medis hasil pemeriksaan laboratorium kunjungan rawat jalan pertama pasien pada tahun 2024. Uji *Shapiro-Wilk* menunjukkan kadar kreatinin tidak terdistribusi normal ($p < 0,001$), sedangkan nilai hemoglobin terdistribusi normal ($p = 0,087$), sehingga analisis bivariat dilakukan dengan uji korelasi *Rank-Spearman*. Hasil penelitian menunjukkan rata-rata kadar kreatinin sebesar 4,2 mg/dL dengan rentang 0,39–25,40 mg/dL. Sebagian besar pasien memiliki kadar kreatinin di atas nilai normal. Nilai hemoglobin memiliki rata-rata 10,72 g/dL dengan rentang 3,70–15,40 g/dL. Mayoritas pasien, terutama perempuan, berada pada kategori hemoglobin rendah. Uji korelasi *Rank-Spearman* menunjukkan adanya hubungan signifikan antara kadar kreatinin dan nilai hemoglobin dengan $p < 0,001$ dan koefisien korelasi $r = –0,557$, yang menandakan kekuatan hubungan sedang serta arah korelasi negatif. Hal ini menunjukkan bahwa semakin tinggi kadar kreatinin, semakin rendah nilai hemoglobin pada pasien PGK. Penelitian ini menyimpulkan bahwa terdapat hubungan bermakna antara kadar kreatinin dan nilai hemoglobin pada pasien PGK di RSUD Kabupaten Buleleng. Temuan ini diharapkan dapat menjadi dasar dalam pemantauan risiko anemia dan peningkatan tata laksana klinis pada pasien PGK.

Kata Kunci: Kadar Kreatinin, Nilai Hemoglonin, Penyakit Ginjal Kronik

THE RELATIONSHIP OF CREATININE LEVELS AND HEMOGLOBIN VALUE IN CHRONIC KIDNEY DISEASE PATIENTS AT BULELENG REGIONAL GENERAL HOSPITAL 2024

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ABSTRACT

Chronic Kidney Disease (CKD) is a progressive renal disorder that frequently leads to anemia as a result of decreased erythropoietin production. This study aimed to analyze the relationship between serum creatinine levels and hemoglobin values in patients with CKD at Buleleng Regional General Hospital in 2024. An analytic correlational study with a cross-sectional design was conducted. The sample consisted of 44 outpatient CKD patients selected using purposive sampling based on predefined inclusion and exclusion criteria. Data were obtained retrospectively from medical records, specifically laboratory results from the patients' initial outpatient visit during 2024. Normality testing using the Shapiro–Wilk test indicated that creatinine levels were not normally distributed ($p < 0.001$), while hemoglobin values showed a normal distribution ($p = 0.087$). Therefore, the Spearman rank correlation test was applied for bivariate analysis. The results showed a mean serum creatinine level of 4.2 mg/dL, with a range of 0.39–25.40 mg/dL, and most patients had creatinine levels above the normal range. The mean hemoglobin value was 10.72 g/dL, ranging from 3.70 to 15.40 g/dL. Low hemoglobin levels were predominantly observed, particularly among female patients. Statistical analysis demonstrated a significant correlation between creatinine levels and hemoglobin values ($p < 0.001$), with a correlation coefficient (r) = –0.557, indicating a moderate negative relationship. This finding suggests that higher creatinine levels are associated with lower hemoglobin values in CKD patients. In conclusion, a significant relationship exists between creatinine levels and hemoglobin values in CKD patients at Buleleng Regional General Hospital. These findings are expected to support anemia risk monitoring and contribute to improved clinical management of patients with CKD.

Keywords: Creatinine Levels, Hemoglobin Values, Chronic Kidney Disease.