

**PERBEDAAN ESTIMASI LFG DAN KESESUAIAN DOSIS OBAT AINS  
PASIEN RAWAT INAP RSUD BANTUL BERDASARKAN FORMULA  
MDRD DAN CKD-EPI**

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**Abstrak :**

Kasus gagal ginjal akut (GGA) di rumah sakit sebesar 60% disebabkan penggunaan obat yang menginduksi penurunan fungsi ginjal. Obat AINS telah teridentifikasi sebagai agen nefrotoksik dengan efek akut dan kronis pada fungsi ginjal. Ketidaktepatan dosis pengobatan pada pasien dengan gangguan fungsi ginjal dapat mengakibatkan pasien mengalami peningkatan risiko efek samping obat termasuk toksisitas ginjal. Fungsi ginjal dapat diketahui dengan mengestimasi nilai estimasi Laju Filtrasi Glomerulus (eLFG). Perhitungan eLFG dapat menggunakan formula *The Modified of Diet in Renal Disease* (MDRD) dan *Chronic Kidney Disease-Epidemiology Collaboration* (CKD-EPI). Penelitian ini merupakan rancangan observasional analitik yang membandingkan nilai eLFG MDRD dengan CKD-EPI serta mengetahui proporsi kesesuaian obat AINS terhadap fungsi ginjal pasien. Terdapat 29 kasus obat yang tidak sesuai berdasarkan MDRD dan 30 CKD-EPI dari total 85 kasus obat. Analisis komparatif 76 nilai eLFG berdasarkan MDRD dan CKD-EPI menggunakan *Mann-Whitney* ( $p = 0,132$ ) menunjukkan perbedaan tidak bermakna. Uji hipotesis komparatif kategorik terkait proporsi kesesuaian dosis obat AINS dengan faktor nilai eLFG pasien menggunakan *Chi-square* ( $p = 0,872$ ) menunjukkan perbedaan tidak bermakna mengenai kesesuaian dosis obat AINS dengan nilai eLFG MDRD dan CKD-EPI. Dapat disimpulkan bahwa kedua formula perhitungan eLFG MDRD dan CKD-EPI berbeda tidak bermakna.

**Kata Kunci :** *eLFG, MDRD, CKD-EPI, Kesesuaian Dosis, AINS*

**ESTIMATION OF GFR AND NSAID DOSE ADJUSTMENT  
COMPARISON BETWEEN MDRD AND CKD-EPI FORMULAS  
TOWARDS INPATIENT AT RSUD BANTUL**

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**Abstract :**

*Drug induced acute kidney injury (AKI) have been implicated in up to 60% of all cases of in-hospital. Nonsteroidal anti-inflammatory drugs (NSAIDs) have been identified as nephrotoxic agents with both acute and chronic effects on kidney function. Inaccurate medicine treatment dose in patients with impaired renal function may increased drug side effects risk, which lead to renal toxicity. Estimated glomerular filtration rate (eGFR) is an important component to get patient's renal function profile. The Modification of Diet in Renal Disease (MDRD) and the Chronic Kidney Disease-Epidemiology Collaboration (CKD-EPI) equations are both commonly used to calculate eGFR. The design of this study was observational analytic that aim to compare the performance of the MDRD and CKD-EPI equations in calculating eGFR and determine the proportion of NSAIDs agents dosage adjustment based on patient's renal function. The result from 85 drugs prescribing there are 29 dosage are not appropriate based on MDRD equition and 30 by CKD-EPI equation. The result of Mann-Whitneyt test (p-value 0,132) means that the differences are not significant between eGFR MDRD and CKD-EPI equations. Categorical comparative hypothesis with Chi-Square test (p-value 0,872) results that the differences are not significant regarding the dosage adjustment of NSAIDs with eGFR MDRD and CKD-EPI equations. It can be concluded that the differences are not significant between eGFR MDRD and CKD-EPI.*

**Keywords :** eGFR, MDRD, CKD-EPI, Dosage Adjustment, NSAIDs Agents