

## INTISARI

KORELASI ANTARA SKOR *INSOMNIA SEVERITY INDEX* DENGAN NILAI *SYSTEMIC IMMUNE-INFLAMMATION INDEX* PADA PASIEN *HEART FAILURE REDUCED EJECTION FRACTION* DI RSUP DR SARDJITO YOGYAKARTA

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**Latar Belakang:** Insomnia merupakan persepsi yang dirasakan pasien mengenai tidur tidak memadai dan dapat dinilai menggunakan *Insomnia Severity Index* (ISI). Prevalensi insomnia diantara pasien gagal jantung cukup tinggi, yaitu sebesar 23-73%. Kondisi insomnia dikaitkan dengan peningkatan penanda inflamasi. *Systemic Immune Inflammation Index* (SII) adalah indeks inflamasi komprehensif yang mencerminkan tiga jenis sel imun yaitu neutrofil, limfosit dan trombosit. Peningkatan SII dikaitkan dengan keluaran buruk pada pasien gagal jantung. Meskipun demikian, korelasi antara ISI dan SII pada pasien *Heart Failure Reduced Ejection Fraction* (HFrEF) masih belum jelas.

**Tujuan:** Mengetahui korelasi antara skor ISI dan nilai SII pada pasien HFrEF di RSUP Dr. Sardjito Yogyakarta.

**Metode:** Penelitian dilakukan secara potong lintang pada pasien penderita HFrEF di RSUP dr. Sardjito pada periode Agustus 2023 – Desember 2023. Uji normalitas data dengan uji Shapiro Wilk. Analisis bivariat dilakukan dengan uji korelasi Spearman, hasil dinyatakan bermakna secara statistik bila nilai  $p < 0.05$ . Analisis multivariat dengan uji regresi linier berganda.

**Hasil:** Diperoleh 47 sampel pasien HFrEF yang memenuhi kriteria inklusi dan eksklusi. Tidak terdapat hubungan antara skor ISI dan nilai SII pada pasien HFrEF di RSUP Dr. Sardjito Yogyakarta ( $p > 0.05$ ).

**Kesimpulan:** Tidak terdapat hubungan antara skor ISI dan nilai SII pada pasien HFrEF di RSUP Dr. Sardjito Yogyakarta.

**Kata Kunci:** *Insomnia Severity Index*, *Systemic Immune Inflammation Index*, *Heart Failure Reduced Ejection Fraction*

## ABSTRACT

### CORRELATION OF INSOMNIA SEVERITY INDEX SCORE AND SYSTEMIC IMMUNE-INFLAMMATION INDEX VALUE IN PATIENT WITH HEART FAILURE REDUCED EJECTION FRACTION IN RSUP DR SARDJITO YOGYAKARTA

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**Background:** Insomnia was patient's perception about inadequate sleep and can be asses with Insomnia Severity Index (ISI). Insomnia prevalence among heart failure patient was about 23-73%. Insomnia was linked to inflammation marker increasing. Systemic Immune inflammation Index (SII) was a comprehensive inflammation index that reflect three imunne cells: neutrophil, lymphocyte, and platelet. The increase of SII was linked to poor outcome in heart failure patients. Nevertheless, correlation of ISI and SII in patient with Heart Failure Reduced Ejection Fraction (HFrEF) still not establish.

**Objective:** To investigate the correlation of ISI score and SII value in patient with HFrEF in RSUP Dr. Sardjito Yogyakarta

**Methods:** This was a cross sectional study on patients with HFrEF in RSUP dr. Sardjito between August 2023 until Desember 2023. Normality test was carried out using the Shapiro Wilk test. Bivariate analysis was carried out using the Spearman correlation test. The result was considered statistically significant when p-value <0.05. Multivariate analysis was carried out using multiple linear regression test.

**Results:** There were 47 HFrEF patients that fullfilled inclusion and exclusion criteria. There is no correlation between ISI score and SII value in patient with HFrEF in RSUP Dr. Sardjito Yogyakarta (p>0.05)

**Conclusion:** There is no correlation between ISI score and SII value in patient with HFrEF in RSUP Dr. Sardjito Yogyakarta

**Keywords:** Insomnia Severity Index, Systemic Immune inflammation Index, Heart Failure Reduced Ejection Fraction