

INTISARI

Latar Belakang: COVID-19 merupakan infeksi yang disebabkan oleh SARS-CoV2 (WHO, 2022). Infeksi ini dapat menular melalui inhalasi dengan mekanisme SARS-CoV2 terhirup lalu akan berikatan dengan sel sekretori pada epithelium hidung melalui reseptor ACE-2. *HALP score* merupakan nilai index inflamasi yang didapatkan dari perhitungan kadar hemoglobin (g / L) × albumin (g / L) × jumlah limfosit (/ L) / jumlah platelet (/ L). Komponen HALP score ini mudah diperoleh pada pemeriksaan dan mudah dihitung.

Tujuan: Menganalisis HALP score sebagai prediktor kematian pada pasien Covid-19 rawat inap di RSUP dr. Sardjito

Metode: Penelitian menggunakan desain cohort retrospective mengambil data hemoglobin, albumin, limfosit, dan platelet dari catatan medik periode Bulan Mei-Oktobre 2021 di RSUP DR. Sardjito. Penelitian ini menganalisis beda proporsi mortalitas terhadap HALP Score kemudian menganalisis keeratan hubungan antara HALP Score dengan mortalitas menggunakan analisis regresi logistik yang bermakna pada uji *chi-square*.

Hasil: Subjek yang memenuhi kriteria inklusi berjumlah 266. Penelitian ini menggunakan rata-rata +2SD yang menunjukkan tidak signifikan secara statistik. Selanjutnya dilakukan pengukuran dengan analisis power dikatakan bahwa hanya dengan 214 sampel penelitian sudah dapat diperoleh power sebesar 91. Analisis regresi logistik menunjukkan bahwa HALP score ikut berperan terhadap mortalitas walaupun hanya sebesar 4,9%.

Kesimpulan: Penurunan HALP score belum dapat dipakai sebagai prediktor kematian pada pasien COVID-19.

Kata Kunci: COVID-19, *HALP score*, *kematian*, cohort retrospective, *consecutive sampling*

ABSTRACT

Background : COVID-19 is an infection caused by SARS-CoV2 (WHO, 2022). This infection can be transmitted through inhalation with the mechanism of SARS-CoV2 inhaled then will bind to secretory cells in the nasal epithelium through ACE-2 receptors. HALP score is an inflammatory index value obtained from the calculation of hemoglobin (g/L) $\times$ albumin (g/L) $\times$ lymphocyte count (/L) / platelet count (/L). The components of HALP score are easy to obtain on examination and easy to calculate.

Objective : Analyzing HALP score as a predictor of mortality in hospitalized Covid-19 patients at dr. Sardjito General Hospital.

Methods : The study used a retrospective cohort design taking data on hemoglobin, albumin, lymphocytes, and platelets from medical records for the period May-October 2021 at Dr. Sardjito Hospital. This study analyzed the difference in the proportion of mortality to HALP Score and then analyzed the closeness of the relationship between HALP Score and mortality using logistic regression analysis which was significant in the chi-square test.

Results : There were 266 subjects who met the inclusion criteria. This study used a mean of $+2SD$ which showed no statistical significance. Furthermore, measurement with power analysis said that only with 214 research samples can be obtained a power of 91. Logistic regression analysis showed that HALP score contributed to mortality even though it was only 4.9%.

Conclusion : The decrease in HALP score cannot be used as a predictor of death in COVID-19 patients.

Keywords: COVID-19, HALP score, mortality, retrospective cohort, consecutive sampling.