Hubungan Antara Skor Indeks Nutrisi Prognostik Terhadap Mortalitas Pasien COVID-19 Derajat Berat dan
Kritis di RSUP Dr. Sardjito
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ABSTRAK

HUBUNGAN ANTARA SKOR INDEKS NUTRISI PROGNOSIS TERHADAP MORTALITAS PASIEN COVID-19 DERAJAT BERAT DAN KRITIS DI RSUP DR SARDJITO

LATAR BELAKANG : Pandemi COVID-19 yang disebabkan oleh virus SARS-CoV-2 telah menelan banyak korban jiwa. Kondisi malnutrisi pada pasien COVID-19 dapat memperburuk luaran klinis dan meningkatkan mortalitas. Penilaian status nutrisi yang baik diperlukan untuk menentukan risiko klinis dan manajemen pasien yang tepat. Oleh karena itu, Indeks Nutrisi Prognostik dapat digunakan sebagai prediktor terhadap mortalitas pasien COVID-19. Saat ini, bukti mengenai korelasi antara kedua variabel masih kurang, sehingga penelitian lebih lanjut perlu dilakukan.

TUJUAN : Penelitian ini bertujuan untuk menganalisis hubungan antara skor Indeks Nutrisi Prognostik terhadap mortalitas pasien COVID-19 derajat berat dan kritis di RSUP dr. Sardjito.

METODE : Penelitian ini menggunakan desain kohort retrospektif dengan sampel penelitian berupa rekam medis pasien COVID-19 di RSUP dr. Sardjito. Skor Indeks Nutrisi Prognostik sebagai variabel independen dan mortalitas sebagai variabel dependen. Analisis deskriptif digunakan untuk menghitung distribusi dan frekuensi setiap variabel penelitian. Perbedaan proporsi mortalitas menurut skor Indeks Prognostik Nutrisi dihitung menggunakan uji Chi-Square dan dilakukan penentuan titik potong skor Indeks Nutrisi Prognostik menggunakan grafik ROC yang kemudian dilanjutkan dengan regresi logistik.

HASIL : Diperoleh 268 data pasien yang memenuhi kriteria. Hubungan antara skor PNI dan mortalitas diukur menggunakan uji Chi-Square dan diperoleh hasil p 0.001. Berdasarkan regresi logistik, skor PNI yang rendah dan penyakit ginjal kronis terbukti meningkatkan risiko kematian (Exp (B) 4.840 dan 6.368, $p<0.05$), sedangkan infeksi saluran kemih justru menurunkan risiko kematian (Exp (B) 0.182, $p<0.05$).

KESIMPULAN : Terdapat hubungan antara skor PNI rendah (≤28.2) terhadap mortalitas pasien COVID-19 derajat berat dan kritis dengan RR sebesar 1.24 (CI = 1.114 – 1.38).

KATA KUNCI : COVID-19, PNI, Mortalitas, Nutrisi, RSUP dr. Sardjito

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ABSTRACT

ASSOCIATION BETWEEN PROGNOSTIC NUTRITIONAL INDEX SCORES AND MORTALITY AMONG PATIENTS WITH SEVERE AND CRITICAL COVID-19 AT DR. SARDJITO GENERAL HOSPITAL

Background : The COVID-19 pandemic caused by the SARS-CoV-2 virus has claimed many lives. Malnutrition in COVID-19 patients can worsen clinical outcomes and increase mortality. Proper nutritional assessment is required to determine clinical risk and ensure appropriate patient management. Therefore, the Prognostic Nutritional Index (PNI) can be used as a predictor of mortality in COVID-19 patients. Currently, evidence showing the correlation between these two variables remains limited, thus further research is needed.

Objective : To determine the relationship between the Prognostic Nutritional Index score and mortality in severe and critical COVID-19 patients at Dr. Sardjito General Hospital.

Methods : This study used a retrospective cohort design with samples obtained from the medical records of severe and critical COVID-19 patients at Dr. Sardjito General Hospital. The Prognostic Nutritional Index score was analyzed as an independent variable, and mortality as the dependent variable. Descriptive analysis was performed to examine the distribution and frequency of each variable. Differences in mortality proportions according to the Prognostic Nutritional Index were analyzed using the Chi-Square test. The cut-off point for the Prognostic Nutritional Index was determined using the ROC curve, followed by logistic regression analysis.

Results : A total of 268 patients met the inclusion criteria. The relationship between the PNI score and mortality was analyzed using the Chi-Square test, resulting in a p-value of 0.001. Based on logistic regression, low PNI scores and chronic kidney disease were shown to increase mortality risk (Exp(B) 4.840 and 6.368, $p<0.05$), while respiratory tract infection also contributed to mortality risk (Exp(B) 10.182, $p<0.05$).

Conclusion : There was a significant association between low PNI scores (≤28.2) and mortality in severe and critical COVID-19 patients, with a relative risk (RR) of 1.24 (CI = 1.114–1.38).

Keywords: COVID-19, PNI, Mortality, Nutrition, Dr. Sardjito Hospital