

**POLITEKNIK KESEHATAN TANJUNGPINANG**  
**PRODI SARJANA TERAPAN TEKNOLOGI LABORATORIUM MEDIS**  
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**Hubungan *C-Reactive Protein (CRP)* Dengan *Neutrophil-Lymphocyte Ratio (NLR)* Pada Pasien Covid-19 Di RSUD Dr.H. Abdul Moeloek Provinsi Lampung**

xiv + 33 halaman, 5 tabel, 3 gambar, dan 9 lampiran

**ABSTRAK**

*Coronavirus Disease 2019 (COVID-19)* adalah penyakit menular yang disebabkan oleh virus SARS-CoV-2. COVID-19 yang menginfeksi manusia menyerang saluran pernafasan dan mengakibatkan berbagai penyakit mulai dari flu hingga penyakit yang serius seperti MERS dan SARS. Pada kondisi terpapar COVID-19 terjadi respon inflamasi, pemeriksaan nilai CRP dan NLR sering digunakan sebagai biomarker status inflamasi. Diperlukan penanda spesifik dan cukup efektif untuk menilai derajat keparahan pasien COVID-19. NLR dan CRP merupakan biomarker yang meningkat pada pasien COVID-19 terutama pada kasus berat. Penelitian ini bertujuan untuk mengetahui hubungan antara nilai CRP dan NLR pada pasien COVID-19. Penelitian ini menggunakan data sekunder rekam medik pasien COVID-19 yang telah dilakukan pemeriksaan nilai CRP dan NLR. Analisa statistik pada 90 pasien COVID-19 subjek penelitian terbanyak yaitu laki-laki 52 pasien (57,8%), rerata nilai CRP 73,2, rerata NLR 5,73, median CRP 49,44 dan median NLR 5,65. Analisis perbedaan nilai CRP terhadap derajat keparahan  $p=0,000$  dan NLR terhadap derajat keparahan  $p\text{-value } 0,045$ . Analisis hubungan nilai CRP dengan nilai NLR terdapat hubungan yang signifikan dengan derajat hubungan lemah ( $p=0,000; r=0,365$ ).

**Kata Kunci** : CRP (*C-Reaktif Protein*), nilai NLR (*Neutrophil-Lymphocyte Ratio*), pasien COVID-19.

**Daftar Bacaan** : 46 (2012-2021).

TANJUNGPURANG HEALTH POLYTECHNIC  
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The Relationship between C-Reactive Protein (CRP) and Neutrophil-Lymphocyte Ratio (NLR) in Covid-19 Patients at RSUD Dr.H. Abdul Moeloek Lampung Province

xiv + 33 pages, 5 tables, 3 pictures and 9 attachments

ABSTRACT

Coronavirus Disease 2019 (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. COVID-19 that infects humans attacks the respiratory tract and causes various diseases ranging from the flu to serious diseases such as MERS and SARS. In conditions exposed to COVID-19 an inflammatory response occurs, examination of CRP and NLR values is often used as a biomarker of inflammatory status. Specific and effective markers are needed to assess the severity of COVID-19 patients. NLR and CRP are biomarkers that are elevated in COVID-19 patients, especially in severe cases. This study aims to determine the relationship between CRP and NLR values in COVID-19 patients. This study uses secondary data from medical records of COVID-19 patients who have examined CRP and NLR values. Statistical analysis on 90 COVID-19 patients, the most research subjects were male 52 patients (57.8%), the average CRP value was 73.2, the average NLR was 5.73, the median CRP was 49.44 and the median NLR was 5.65. Analysis of the difference in the value of CRP to the severity of 0.000 and NLR to the severity of the p-value of 0.045. Analysis of the relationship between CRP values and NLR values showed a significant relationship with the degree of weak relationship ( $p=0.000$ ;  $r=0.365$ ). .

Keywords : CRP (C-Reactive Protein), NLR (Neutrophil-Lymphocyte Ratio), COVID-19 patients.  
Reading List : 46 (2012-2021).