

ABSTRAK

Tiara Putri Nur Aini

HUBUNGAN NILAI NEUTROPHIL LYMPHOCYTE RATIO (NLR) DAN KADAR C-REACTIVE PROTEIN (CRP) DENGAN TROMBOSIT PADA PASIEN TERDUGA DEMAM BERDARAH DENGUE

xviii + 83 halaman + 7 tabel + 7 lampiran

Peningkatan kasus Demam Berdarah Dengue (DBD) memerlukan parameter laboratorium yang dapat digunakan untuk membantu pemantauan kondisi pasien. Penelitian ini bertujuan menganalisis hubungan nilai *Neutrophil Lymphocyte Ratio* (NLR) dan kadar C-Reactive Protein (CRP) dengan jumlah trombosit pada pasien terduga DBD. Penelitian observasional analitik dengan pendekatan *cross sectional* ini dilakukan di Rumah Sakit Islam Surabaya Jemursari pada September 2025-Mei 2026. Sebanyak 30 pasien terduga DBD dipilih menggunakan teknik purposive sampling. Nilai NLR, kadar CRP, dan jumlah trombosit diperiksa menggunakan *hematology analyzer* dan *chemistry analyzer*, kemudian dianalisis menggunakan uji korelasi Spearman Rank.

Hasil penelitian menunjukkan rerata NLR sebesar 2,71, CRP sebesar 23,74 mg/L dan trombosit sebesar $106,67 \times 10^3/\mu\text{L}$. Sebagian besar responden mengalami trombositopenia (90%) dan memiliki kadar CRP tinggi (56,7%). Hasil uji Spearman menunjukkan tidak terdapat hubungan yang signifikan antara NLR dengan trombosit ($p=0,485$; $r=-0,132$) maupun CRP dengan trombosit ($p=0,674$; $r=-0,080$). Dapat disimpulkan bahwa tidak terdapat hubungan yang signifikan antara nilai NLR maupun kadar CRP dengan jumlah trombosit pada pasien terduga DBD. Penelitian selanjutnya disarankan menggunakan pasien DBD yang telah terkonfirmasi dan melakukan pengelompokan berdasarkan hari demam yang lebih spesifik.

Kata kunci : Demam Berdarah Dengue (DBD), *Neutrophil Lymphocyte Ratio* (NLR), C-Reactive Protein (CRP), trombositopenia, inflamasi.

Daftar Bacaan : 28 jurnal (2020 - 2026) dan 29 buku (2016 - 2024)

ABSTRACT

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CORRELATION BETWEEN NEUTROPHIL LYMPHOCYTE RATIO (NLR) AND C-REACTIVE PROTEIN (CRP) LEVELS WITH PLATELET COUNT IN PATIENTS WITH SUSPECTED DENGUE HEMORRHAGIC FEVER

xviii + 83 pages + 15 tables + 7 appendices

The rise in cases of Dengue Haemorrhagic Fever (DHF) necessitates laboratory parameters that can be used to assist in monitoring patients' conditions. This study aims to analyse the correlation between the Neutrophil-Lymphocyte Ratio (NLR) and C-Reactive Protein (CRP) levels with platelet count in patients suspected of having DHF. This analytical observational study with a cross-sectional design was conducted at Surabaya Jemursari Islamic Hospital from September 2025 to May 2026. A total of 30 patients suspected of having DHF were selected using purposive sampling. NLR values, CRP levels, and platelet counts were measured using a hematology analyzer and a chemistry analyzer, and subsequently analysed using the Spearman's rank correlation test.

The results showed a mean NLR of 2.71, a CRP level of 23.74 mg/L and a platelet count of $106.67 \times 10^3/\mu\text{L}$. The majority of participants had thrombocytopenia (90%) and elevated CRP levels (56.7%). The Spearman test results showed no significant association between NLR and platelet count ($p=0.485$; $r=-0.132$) or between CRP and platelet count ($p=0.674$; $r=-0.080$). It can be concluded that there is no significant association between NLR values or CRP levels and platelet count in patients suspected of having DHF. Further research is recommended using confirmed DHF patients and grouping them based on a more specific number of fever days.

Keywords: Dengue Hemorrhagic Fever (DHF), Neutrophil Lymphocyte Ratio (NLR), C-Reactive Protein (CRP), thrombocytopenia, inflammation.

Reading List: 28 journals (2020 - 2026) and 29 book (2016 – 2024)