

ABSTRAK

Aisha Amelia Yasmin

DETEKSI NILAI *NEUTROPHIL TO LYMPHOCYTE RATIO* (NLR), *PLATELET TO LYMPHOCYTE RATIO* (PLR), TEKanan DARAH PADA IBU HAMIL DALAM PENCEGAHAN PREEKLAMPSIA

xv + 79 halaman + 4 tabel + 9 lampiran

Preeklampsia ialah komplikasi kehamilan yang ditandai oleh disfungsi endotel dan inflamasi sistemik, sehingga memerlukan upaya deteksi dini. Indeks inflamasi berbasis rasio seperti *Neutrophil to Lymphocyte Ratio* (NLR) dan *Platelet to Lymphocyte Ratio* (PLR) serta pemantauan tekanan darah dapat merepresentasikan perubahan hemodinamik dan respons imun maternal. Penelitian ini bertujuan untuk mengetahui nilai NLR, PLR, dan tekanan darah pada ibu hamil dalam upaya pencegahan preeklampsia. Desain penelitian ini adalah kuantitatif deskriptif. Penelitian dilaksanakan di Puskesmas Mojo Surabaya pada bulan Januari hingga Maret 2025. Pengambilan sampel melibatkan 32 responden ibu hamil Trimester II (11) dan Trimester III (21) yang memenuhi kriteria inklusi. Hasil penelitian menunjukkan persentase ibu hamil kategori NLR tinggi lebih banyak ditemukan di Trimester III (71,4%) dengan nilai maksimal mencapai 7,00, dibandingkan Trimester II (54,5%) dengan nilai maksimal 5,26. Pada parameter PLR, nilai rata-rata Trimester II (168,03) lebih tinggi dibandingkan Trimester III (157,66), namun lonjakan nilai PLR tertinggi secara individu ditemukan pada Trimester III (313,50). Pemantauan tekanan darah menunjukkan sebagian besar responden (93,8%) berada dalam rentang normotensi, sementara 6,3% memasuki kategori hipertensi dengan nilai sistolik tertinggi 144 mmHg (Trimester III) dan diastolik tertinggi 104 mmHg (Trimester II). Kesimpulan dari penelitian ini adalah terdapat kecenderungan peningkatan nilai absolut NLR dan tekanan darah sistolik pada Trimester III seiring bertambahnya usia kehamilan. Integrasi pengukuran tekanan darah dengan nilai absolut NLR dan PLR terbukti berpotensi sebagai parameter skrining deteksi dini risiko preeklampsia yang bersifat individual dan fluktuatif.

Kata Kunci: *Neutrophil to Lymphocyte Ratio* (NLR), *Platelet to Lymphocyte Ratio* (PLR), Tekanan Darah, Preeklampsia

Daftar Bacaan : 40 jurnal (2021-2025) dan 2 buku (2021)

ABSTRACT

Aisha Amelia Yasmin

DETECTION OF NEUTROPHIL TO LYMPHOCYTE RATIO (NLR) VALUES, PLATELET TO LYMPHOCYTE RATIO (PLR) VALUES, AND BLOOD PRESSURE IN PREGNANT WOMEN FOR THE PREVENTION OF PREECLAMPSIA

xv + 79 pages + 4 tables + 9 attachments

Preeclampsia is a pregnancy complication characterized by endothelial dysfunction and systemic inflammation, necessitating early detection efforts. Ratio-based inflammatory indices such as the Neutrophil to Lymphocyte Ratio (NLR) and Platelet to Lymphocyte Ratio (PLR), along with blood pressure monitoring, can represent maternal hemodynamic changes and immune responses. This study aims to describe the profiles of NLR, PLR, and blood pressure in pregnant women as part of preeclampsia prevention efforts. The study design was descriptive quantitative. The research was conducted at the Mojo Health Center in Surabaya from January to March 2025. Sampling involved 32 pregnant women (11 respondents in the second trimester and 21 respondents in the third trimester) who met the inclusion criteria. The results showed that the percentage of pregnant women with a high NLR category was more frequently found in the third trimester (71.4%) with a maximum value of 7.00, compared to the second trimester (54.5%) with a maximum value of 5.26. In the PLR parameter, the mean value for the second trimester (168.03) was higher than the third trimester (157.66); however, the highest individual PLR spike was found in the third trimester (313.50). Blood pressure monitoring showed that the majority of respondents (93.8%) were within the normotensive range, while 6.3% fell into the hypertensive category, with the highest systolic value of 144 mmHg (third trimester) and the highest diastolic value of 104 mmHg (second trimester). The conclusion of this study is that there is a tendency for an increase in absolute NLR values and systolic blood pressure in the third trimester as gestational age increases. The integration of blood pressure measurements with absolute NLR and PLR values proves potential as individualized and fluctuating screening parameters for early detection of preeclampsia risk.

Keywords: Neutrophil to Lymphocyte Ratio (NLR), Platelet to Lymphocyte Ratio (PLR), Blood Pressure, Preeclampsia.

References: 40 journals (2021-2025) and 2 books (2021)