

ABSTRAK

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PERBANDINGAN NILAI MEAN PLATELET VOLUME (MPV), PLATELET DISTRIBUTION WIDTH (PDW), DAN PLATELET-TO-LYMPHOCYTE RATIO (PLR) PADA IBU HAMIL DENGAN PREEKLAMPSIA DI TRIMESTER I DAN III

vi + 71 Halaman + 9 Tabel + 10 Lampiran

Pembangunan kesehatan di Indonesia masih menghadapi tantangan besar seperti angka kematian ibu (AKI) dengan jumlah tinggi. Preeklampsia menjadi faktor utama AKI, dicirikan dengan hipertensi setelah kehamilan 20 minggu. Disfungsi endotel, aktivasi koagulasi, dan agregasi trombosit terjadi pada preeklampsia dan memengaruhi parameter hematologi seperti MPV, PDW, PLR.

Penelitian ini adalah studi observasional analitik menggunakan *cross-sectional* untuk membandingkan nilai MPV, PDW, dan PLR pada ibu hamil preeklampsia trimester I dan trimester III. Riset diselenggarakan pada Laboratorium Puskesmas Mojo dalam rentan waktu Oktober 2025–April 2026. Pengukuran nilai MPV, PDW dan PLR diperoleh dari hasil pemeriksaan darah lengkap yang ditelaah dengan Uji Independent T-test untuk melihat perbandingan antara trimester I dan III.

Temuan penelitian menunjukkan bahwa rerata nilai *Mean Platelet Volume* (MPV), *Platelet Distribution Width* (PDW), dan *Platelet-to-Lymphocyte Ratio* (PLR) pada ibu hamil preeklampsia cenderung meningkat. Rata-rata nilai MPV meningkat dari 9,16 fL menjadi 9,40 fL, nilai PDW 10,85 fL menjadi 11,73 fL, dan nilai PLR 151,76 menjadi 164,74. Namun, hasil uji Independent T-test mengidentifikasi hasil yang relatif sama diantara ketiga parameter pada ibu hamil dengan preeklampsia ($p>0,05$). Maka, dapat ditarik kesimpulan bahwa nilai MPV, PDW, dan PLR pada ibu hamil preeklampsia trimester III lebih tinggi dibandingkan trimester I. Namun, peningkatan nilai MPV, PDW, dan PLR tidak menunjukkan perbedaan yang signifikan secara statistik.

Kata Kunci : Preeklampsia, MPV, PDW, PLR, Trimester Kehamilan.

Daftar bacaan: 5 buku (2017 - 2025), 49 Jurnal (2020-2026).

ABSTRACT

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COMPARISON OF MEAN PLATELET VOLUME (MPV), PLATELET DISTRIBUTION WIDTH (PDW), AND PLATELET-TO-LYMPHOCYTE RATIO (PLR) VALUES IN PREGNANT WOMEN WITH PREECLAMPSIA IN THE FIRST AND THIRD TRIMESTERS

vii + 71 Pages + 9 Tables + 10 Appendices

Health development in Indonesia continues to face major challenges, including a high maternal mortality rate. Preeclampsia is one of the major contributors to maternal mortality and is characterized by hypertension occurring after 20 weeks of pregnancy. Endothelial dysfunction, coagulation activation, and platelet aggregation occur in preeclampsia and may affect hematological parameters such as Mean Platelet Volume (MPV), Platelet Distribution Width (PDW), and Platelet-to-Lymphocyte Ratio (PLR).

This study employed an analytical observational design with a cross-sectional approach to compare MPV, PDW, and PLR values among pregnant women with preeclampsia in first and third trimesters. The study was carried out at the Laboratory of Mojo Community Health Center from October 2025 to April 2026. MPV, PDW, and PLR values were obtained from complete blood count examinations and analyzed using an Independent Samples t-test to compare the parameters between the first and third trimesters.

The findings showed that mean values of Mean Platelet Volume (MPV), Platelet Distribution Width (PDW), and Platelet-to-Lymphocyte Ratio (PLR) in pregnant women with preeclampsia tended to increase. The mean MPV increased from 9.16 fL to 9.40 fL, PDW from 10.85 fL to 11.73 fL, and PLR from 151.76 to 164.74. However, the Independent Samples t-test showed no statistically significant differences among the three parameters in pregnant women with preeclampsia ($p > 0.05$). Therefore, it can be concluded that MPV, PDW, and PLR values were higher in pregnant women with preeclampsia in the third trimester than in the first trimester. Nevertheless, the increases in MPV, PDW, and PLR were not statistically significant.

Keywords: Preeclampsia, MPV, PDW, PLR, Pregnancy Trimester.

References: 5 books (2017 - 2025), 49 journals (2020–2026).