

ABSTRAK

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KORELASI NILAI MONOSIT LIMFOSIT RASIO (MLR) TERHADAP HASIL IMMUNOGLOBULIN M (IgM) DAN IMMUNOGLOBULIN G (IgG) DENGUE PADA PASIEN DEMAM BERDARAH DI RSUD UMBU RARA MEHA WAINGAPU SUMBA TIMUR, NTT

xvi + 57 Halaman + 6 Tabel + 11 Lampiran

Demam Berdarah Dengue (DBD) masih menjadi salah satu masalah kesehatan masyarakat yang banyak dijumpai di wilayah tropis, termasuk Indonesia. Penegakan diagnosis penyakit ini didukung oleh pemeriksaan hematologi dan serologi. Monosit Limfosit Rasio (MLR) merupakan parameter hematologi yang dapat menggambarkan respons inflamasi, sedangkan pemeriksaan *Immunoglobulin G* (IgG) dan *Immunoglobulin M* (IgM) digunakan untuk mengidentifikasi respons imun serta fase infeksi Dengue. Penelitian ini bertujuan mengetahui korelasi nilai MLR terhadap hasil pemeriksaan IgG dan IgM pada pasien *Dengue* di RSUD Umbu Rara Meha Waingapu. Penelitian ini menggunakan rancangan analitik observasional dengan pendekatan *cross-sectional* yang dilaksanakan pada November 2025 hingga April 2026. Sebanyak 32 pasien DBD dipilih sebagai sampel melalui teknik *purposive sampling* sesuai dengan kriteria inklusi dan eksklusi. Nilai MLR diperoleh dari pemeriksaan hematologi menggunakan alat Mindray BC-700, sedangkan pemeriksaan serologi dilakukan dengan Rapid Diagnostic Test (RDT) IgG/IgM. Analisis data diawali dengan uji normalitas Shapiro–Wilk, kemudian dilanjutkan menggunakan uji korelasi Spearman karena data tidak berdistribusi normal. Hasil penelitian menunjukkan sebagian besar responden memiliki nilai MLR meningkat sebanyak 75% dan MLR normal sebanyak 25%. Hasil serologi menunjukkan IgG positif sebanyak 81,3%, IgM positif 9,4%, serta IgG dan IgM positif bersamaan 9,4%. Hasil uji korelasi menunjukkan hubungan MLR dengan IgG memiliki nilai $p=0,075$ dan hubungan MLR dengan IgM memiliki nilai $p=0,394$, sehingga keduanya tidak signifikan. Kesimpulan penelitian ini adalah tidak menunjukkan hubungan yang signifikan dengan hasil pemeriksaan IgG maupun IgM pada pasien Demam Berdarah Dengue.

Kata kunci : MLR, IgG, IgM, *Dengue*, DBD

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ABSTRACT

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CORRELATION OF MONOCYTE LYMPHOCYTE RATIO (MLR) TO IMMUNOGLOBULIN M (IGM) AND IMMUNOGLOBULIN G (IGG) IN DENGUE FEVER PATIENTS AT UMBU RARA MEHA WAINGAPU REGIONAL HOSPITAL, EAST SUMBA, NTT, INDONESIA

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Dengue Hemorrhagic Fever (DHF) remains a major public health concern in tropical regions, including Indonesia. The diagnosis of dengue infection is supported by both hematological and serological examinations. The Monocyte-to-Lymphocyte Ratio (MLR) is a hematological parameter that reflects the inflammatory response, while Immunoglobulin G (IgG) and Immunoglobulin M (IgM) serological tests are used to identify the immune response and determine the stage of dengue infection. This study aimed to determine the correlation between the Monocyte-to-Lymphocyte Ratio (MLR) and the results of IgG and IgM examinations in patients with Dengue Hemorrhagic Fever at Umbu Rara Meha Regional General Hospital, Waingapu. This observational analytic study employed a cross-sectional design and was conducted from November 2025 to April 2026. A total of 32 patients diagnosed with Dengue Hemorrhagic Fever were selected using a purposive sampling technique based on predefined inclusion and exclusion criteria. The MLR values were obtained from complete blood count analysis using the Mindray BC-700 hematology analyzer, while IgG and IgM antibodies were detected using a Rapid Diagnostic Test (RDT). Data analysis began with the Shapiro–Wilk normality test, followed by Spearman's rank correlation test because the data were not normally distributed. The findings showed that 75% of the respondents had an elevated MLR, while 25% had a normal MLR. Serological examination revealed that 81.3% of the patients were positive for IgG, 9.4% were positive for IgM, and 9.4% were positive for both IgG and IgM. Spearman correlation analysis demonstrated that the correlation between MLR and IgG yielded a p-value of 0.075, whereas the correlation between MLR and IgM yielded a p-value of 0.394. Both results indicated no statistically significant correlation. There was no significant correlation between the Monocyte-to-Lymphocyte Ratio (MLR) and the results of IgG or IgM serological examinations in patients with Dengue Hemorrhagic Fever (DHF)

Keywords: Dengue, Monocyte to Lymphocyte Ratio, IgG, IgM, Serology

References: 8 Books and 46 Journals (2016–2026)