

ABSTRAK

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Program Studi : Kedokteran Umum
Judul Skripsi : Korelasi Antara Kadar Limfosit dengan Tingkat Mortalitas Pasien COVID-19 di Rumah Sakit Ummi Bogor dan Tinjauannya Menurut Pandangan Islam

Latar Belakang: COVID-19 (*Coronavirus Disease 2019*) merupakan penyakit infeksi sistemik yang dapat mempengaruhi fungsi hemostasis dan hematopoiesis tubuh. Manifestasi klinis yang sering muncul adalah demam, kelelahan, diare, nyeri otot dan pneumonia, bahkan dapat menyebabkan kematian. Hasil pemeriksaan darah lengkap pada kebanyakan pasien menunjukkan limfopenia (83,2%) yang diantaranya 36,2% mengalami trombositopenia dan 33,7% mengalami leukopenia. Ada beberapa faktor yang dapat menjelaskan hubungan antara COVID-19 dengan limfopenia. Salah satunya adalah virus dapat melisis limfosit, cytokine storm yang menyebabkan apoptosis limfosit dan atrofi organ limfoid.

Tujuan Penelitian: Penelitian ini bertujuan untuk mengetahui ada atau tidaknya korelasi antara kadar limfosit dengan *outcome* atau tingkat mortalitas pasien COVID-19 di Rumah Sakit Ummi Bogor.

Metode: Rancangan penelitian yang digunakan adalah rancangan deskriptif dengan menggunakan data retrospektif. Data diambil dengan menggunakan data sekunder dari rekam medis pasien COVID-19 di Rumah Sakit Ummi Bogor. Penelitian ini menggunakan metode analisis univariat variabel bebas dan terikat, serta analisis bivariat untuk melihat ada atau tidaknya hubungan korelasi antara kedua variabel tersebut

Hasil: Pada pemeriksaan hitung jenis leukosit pasien COVID-19 periode Januari – Juni 2021 di laboratorium RS Ummi Bogor, mayoritas memiliki hasil pemeriksaan limfosit rendah (<25%) yaitu 166 orang (63.1%). Pada kategori limfosit normal (25 – 35%) terdapat 61 orang (23.2%) sedangkan pada kategori limfosit tinggi (>35%) hanya terdapat 36 orang (13.7%). Pada hasil penelitian tingkat mortalitas pasien COVID-19 di RS Ummi Bogor periode Januari – Juni 2021, terdapat 44 pasien yang meninggal dengan mayoritas memiliki kadar limfosit yang rendah yaitu sebanyak 39 orang, sedangkan 3 orang lainnya memiliki kadar limfosit normal dan 2 orang memiliki kadar limfosit tinggi. Berdasarkan hasil uji analisis bivariat Chi-square, pada korelasi antara kadar limfosit dengan tingkat mortalitas pasien COVID-19 di RS Ummi Bogor didapatkan signifikansi sebesar 0.001.

Kesimpulan: Terdapat korelasi antara kadar limfosit dengan *outcome* atau tingkat mortalitas pasien COVID-19 di RS Ummi Bogor periode Januari - Juni 2021.

Kata Kunci: COVID-19, Limfosit, Tingkat mortalitas

ABSTRACT

Name : Salsabila Dinda Aulia
Study Program : Medicine
Title : *The Correlation Between Lymphocyte Levels and the Mortality Rate of COVID-19 Patients at Ummi Bogor Hospital and Their Review from an Islamic View*

Background: COVID-19 (Coronavirus Disease 2019) is a systemic infectious disease that can affect the body's hemostasis and hematopoiesis function. Clinical manifestations that often appear are fever, fatigue, diarrhea, muscle aches and pneumonia, and can even cause death. Complete blood count results in most patients showed lymphopenia (83.2%) of which 36.2% had thrombocytopenia and 33.7% had leukopenia. There are several factors that could explain the association between COVID-19 and lymphopenia. One of them is the virus can lyse lymphocytes, cytokine storm which causes apoptosis of lymphocytes and atrophy of lymphoid organs.

Research Objectives: This study aims to determine whether or not there is a correlation between lymphocyte levels and the outcome or mortality rate of COVID-19 patients at Ummi Hospital, Bogor.

Methods: The research design used is a descriptive design using retrospective data. The data was taken using secondary data from the medical records of COVID-19 patients at the Bogor Ummi Hospital. This study uses univariate analysis of independent and dependent variables, as well as bivariate analysis to see whether or not there is a correlation between the two variables.

Results: In the examination of the leukocyte count of COVID-19 patients for the period January – June 2021 at the Bogor Ummi Hospital laboratory, the majority had low lymphocyte examination results (<25%) namely 166 people (63.1%). In the normal lymphocyte category (25 – 35%) there were 61 people (23.2%) while in the high lymphocyte category (> 35%) there were only 36 people (13.7%). In the results of the study on the mortality rate of COVID-19 patients at Ummi Hospital, Bogor for the period January - June 2021, there were 44 patients who died with the majority having low lymphocyte levels, namely 39 people, while 3 other people had normal lymphocyte levels and 2 people had lymphocyte levels. tall. Based on the results of the Chi-square bivariate analysis test, the correlation between lymphocyte levels and the mortality rate of COVID-19 patients at Ummi Hospital, Bogor, obtained a significance of 0.001.

Conclusion: There is a correlation between lymphocyte levels and the outcome or mortality rate of COVID-19 patients at Ummi Hospital Bogor for the period January - June 2021.

Keywords: COVID-19, Lymphocytes, Mortality rate