

### ABSTRAK

Beberapa tahun terakhir penyakit COVID-19 menjadi wabah di seluruh dunia tak terkecuali Indonesia. Virus *Corona* adalah virus yang menyerang sistem imun khususnya pada sistem pernapasan manusia. Lansia merupakan kelompok berisiko tinggi terinfeksi COVID-19, dan seiring bertambahnya usia membuat lansia berisiko memiliki gejala yang berat saat terinfeksi COVID-19. Leukosit mempunyai peranan dalam pertahanan sistem imun terhadap benda asing. Pada lansia yang rentan terserang COVID-19 memiliki hubungan dengan sistem imun. Penelitian ini dilakukan untuk melihat gambaran leukosit pada pasien lansia rawat inap terkonfirmasi COVID-19 di Rumah Sakit Umum Daerah (RSUD) Haji Provinsi Jawa Timur. Metode penelitian yang digunakan ialah metode penelitian observasional deskriptif. Sampel yang terlibat pada penelitian ini adalah 93 pasien lansia (berusia diatas 60 tahun) rawat inap terkonfirmasi COVID-19 yang memenuhi kriteria inklusi. Berdasarkan penelitian didapatkan hasil pemeriksaan laboratorium pasien lansia laki-laki dengan kadar leukosit normal sebanyak 43 orang (81%) sedangkan pada pasien lansia perempuan sebanyak 27 orang (67%). Kadar leukosit rendah pada pasien lansia laki-laki sebanyak 1 orang (2%) sedangkan pada pasien lansia perempuan sebanyak 2 orang (5%). Kadar leukosit tinggi pada pasien lansia laki-laki sebanyak 9 orang (17%) sedangkan pada pasien lansia perempuan sebanyak 11 orang (28%). Kelompok usia terbanyak berada direntang usia 60-64 tahun sebanyak 34 orang (37%). Ditemukan kadar leukosit jenis kelamin laki-laki yang tertinggi yaitu  $20.880 \text{ mm}^3$  (usia 79 tahun), dibawah nilai normal yaitu  $4.320 \text{ mm}^3$  (usia 61). Ditemukan kadar leukosit jenis kelamin perempuan yang kritis yaitu  $20.700 \text{ mm}^3$  (usia 67 tahun), dibawah nilai normal yaitu  $3760 \text{ mm}^3$  (usia 81 tahun).

Kata Kunci : COVID-19 (*Coronavirus Disease-19*), Leukosit, Lansia (lanjut usia).

**ABSTRACT**

*In recent years, the COVID-19 disease has become an epidemic throughout the world, including Indonesia. Corona virus is a virus that attacks the immune system, especially the human respiratory system. The elderly are a group at high risk of being infected with COVID19, and as they get older they are at high risk of having severe symptoms when infected with COVID-19. Leukocytes have a role in the defense of the immune system against foreign objects. Elderly people who are susceptible to COVID-19 have a relationship with the immune system. This study was conducted to see the description of leukocytes level in elderly patients confirmed COVID-19 who were hospitalized at the Haji Regional General Hospital (RSUD) East Java Province. The research method used is descriptive observational research method. The samples used were elderly patients hospitalized with confirmed COVID-19 who met the research inclusion criteria, namely aged over 60 years for the 2021 period. The samples used in this study were 93 patients. Based on the research, the results of laboratory examinations for elderly male patients with normal leukocyte levels were 43 people (81%) while in elderly female patients there were 27 people (67%). Low leukocyte level were found in 1 (2%) male elderly patient, while in female elderly patients were 2 (5%) patients. High leukocyte level were found in 9 (17%) male elderly patient, while in female elderly patients were 11 (28%) patients. The highest age group were in the age range of 60-64 years which was 34 (37%) patients. It was found that the critical male leukocyte level was  $20,880 / \text{mm}^3$  (age 79 years old), below the normal value was  $4,320 / \text{mm}^3$  (age 61 years old). It was found that the critical female leukocyte level was  $20,700 / \text{mm}^3$  (67 years old), below the normal value was  $3,760 / \text{mm}^3$  (81 years old)*

*Keywords: COVID-19 (Coronavirus Disease-19), Leukocytes, Elderly (elderly).*