ABSTRAK

Coronavirus disease (COVID-19) adalah penyakit pernapasan yang sangat menular yang dengan cepat menyebar. Neutrofil melepaskan sejumlah besar *reactive oxygen species*, sedangkan limfosit yang rendah menggambarkan imunitas tubuh yang lemah yang mengakibatkan tubuh sulit dalam melawan virus, akibat masa pemulihan menjadi lebih lama sehingga terjadinya perpanjangan hari perawatan, sehingga RNL dikaitkan dengan lama rawat inap pasien COVID-19. Tujuan dari penelitian ini adalah untuk mengetahui apakah ada hubungan antara RNL, derajat keparahan, komorbid, jenis kelamin dan usia terhadap lama rawat inap pasien positif COVID-19 serta untuk mengetahui variabel yang paling berhubungan dengan lama rawat inap pasien. Penelitian ini merupakan penelitian non-eksperimental observasi analitik dengan pendekatan *study cross sectional* dan pengambilan sampel menggunakan teknik *purposive sampling*. Sebanyak 129 pasien COVID-19 terkonfirmasi melalui RT-PCR di RS Bethesda Yogyakarta. Hasil uji *chisquare* pada selang kepercayaan 95% dengan $p < 0,05$ menunjukkan bahwa terdapatnya hubungan antara RNL ($p= 0,034$), derajat keparahan ($p=0,006$), komorbid ($p=0,015$), dan usia ($p=0,047$) terhadap lama rawat inap pasien COVID-19. Berdasarkan analisis regresi logistik, ditemukan terdapatnya hubungan antara derajat keparahan ($p=0,019$) dan komorbid ($p=0,028$) dan tidak terdapatnya hubungan RNL ($p=0,112$) dan Usia ($p=0,099$) terhadap lama rawat inap pasien COVID-19 di RS Bethesda Yogyakarta.

Kata kunci: RNL, Derajat Keparahan, Komorbid, Jenis Kelamin, Usia, Lama Rawat Inap, COVID-19.

ABSTRACT

Coronavirus disease (COVID-19) is a highly contagious respiratory disease that is rapidly spreading. Neutrophils release a large number of reactive oxygen species, while low lymphocytes describe weak body immunity that makes it difficult for the body to fight the virus, as a result of the recovery period becomes longer so that there is an extension of the treatment day, so NLR is associated with long hospitalization of COVID-19 patients. The purpose of this study was to determine whether there is a relationship between NLR, severity, comorbidities, sex and age to the length of stay of COVID-19 positive patients and to determine the variables that are most associated with the length of stay of patients. This study is a non-experimental analytical observation with cross sectional study approach and sampling using purposive sampling techniques. A total of 129 COVID-19 patients were confirmed through RT-PCR at Bethesda Hospital Yogyakarta. The results of the chisquare Test at a 95% confidence interval with $p < 0.05$ showed that there was a relationship between NLR ($p= 0.034$), severity ($p=0.006$), comorbidities ($p=0.015$), and age ($p=0.047$) to the length of stay of COVID-19 patients. Based on logistic regression analysis, it was found that there was a relationship between the degree of severity ($p=0.019$) and comorbidities ($p=0.028$) and there was no relationship between NLR ($p=0.112$) and age ($p=0.099$) to the length of hospitalization of COVID-19 patients at Bethesda Hospital Yogyakarta.

Keywords: NLR, degree of severity, comorbidities, sex, age, length of stay, COVID-19.