## ABSTRAK

**Latar Belakang:** Menurut data WHO, per 18 Februari 2022 sudah terdapat 418.650.474 kasus terkonfirmasi COVID-19 dengan jumlah kematian mencapai 5.586.224 jiwa di seluruh dunia. Sedangkan, di Indonesia sendiri, terdapat 5.089.637 kasus terkonfirmasi COVID-19 dengan jumlah kematian mencapai 146.044 jiwa. Perlu diketahui, kadar yang rendah pada serum albumin merupakan prediktor yang penting dari morbiditas dan mortalitas. Untuk itu, peneliti tertarik untuk meneliti korelasi kadar albumin serum terhadap derajat berat COVID-19.

**Tujuan:** Menemukan korelasi antara kadar albumin serum terhadap derajat berat pasien COVID-19 di RSUP Dr Kariadi, Semarang, Indonesia.

**Metode:** Data yang dikumpulkan dan diperoleh dari observasi catatan medis pasien diolah dengan analisis bivariat dengan menggunakan analisis korelasi Spearman untuk dicari seberapa berkorelasi variabel bebas dan terikat dengan program komputer SPSS.

**Hasil:** Pada analisis Spearman, ditemukan r sejumlah -0,323 yang berarti kadar albumin serum dan derajat berat yang memiliki korelasi terbalik, dan nilai p sejumlah 0,001 (<0,05) yang menandakan kedua variabel memiliki korelasi yang signifikan. Secara keseluruhan, prevalensi pasien COVID-19 hipoalbuminemia mencapai 75,9% dari seluruh subjek. Pasien COVID-19 derajat sedang memiliki prevalensi 16,5%, pasien derajat berat 17,7%, dan pasien meninggal dunia 41,8%.

**Kesimpulan:** Terdapat korelasi antara kadar albumin serum terhadap derajat berat COVID-19 dan ditemukannya peningkatan prevalensi pasien hypoalbuminemia seiring dengan meningkatnya derajat berat COVID-19.



**Kata kunci** : COVID-19, albumin

## ABSTRACT

**Background:** According to WHO data, as of February 18, 2022, there were 418,650,744 confirmed cases of COVID-19 with the number of deaths reaching 5,586,224 people worldwide. While in Indonesia alone, there are 5,089,637 confirmed cases of COVID-19 with the number of deaths reaching 146,044 people. It should be noted that low levels of serum albumin are important predictors of morbidity and mortality. For this reason, researcher was interested in examining the correlation between serum albumin levels and the severity of COVID-19.

**Objective:** To find a correlation between serum albumin levels and the severity of COVID-19 patients in RSUP Dr Kariadi, Semarang, Indonesia.

**Methods:** Data collected and obtained from observations of patients' medical records were processed by bivariate analysis using Spearman correlation analysis to search for independent and dependent correlated variables on the SPSS computer program.

**Results:** In Spearman analysis, it was found that r was -0.323, which means serum albumin levels and weight were inversely correlated, and p-value was 0.001 (<0.05) which indicated that the second variable had a significant correlation. Overall, the prevalence of COVID-19 patients with hypoalbuminemia reached 75.9% of all subjects. Moderate COVID-19 patients had 16.5% prevalence of hypoalbuminemia, 17,7% in severe COVID-19 and 41,8% in patients who died.

**Conclusion:** There were a correlation between serum albumin levels and the severity of COVID-19 and an increase in the prevalence of hypoalbuminemia patients is found along with the severity of COVID-19



**Keywords:** COVID-19, albumin