

## THE RELATIONSHIP BETWEEN SOARS SCORES AND MORTALITY IN SEVERE AND CRITICAL COVID-19 PATIENT

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**Background:** SOARS score is a test to measure the severity and criticality of Covid-19. Consist of SOARS ( SpO<sub>2</sub>, Obesity, Age, Respiratory rate, and Stroke history) The higher value of SOARS scores the higher risk of mortality in severe and critical Covid-19. Mortality in severe and critical Covid-19 within 14 days since admission to the emergency room.

**Objectives:** To evaluate the relationship between SOARS score and mortality in severe and critical Covid-19 patient.

**Method:** This study is use retrospective cohort study and the research population is adult severe and critical Covid-19 patient in RSUP Sardjito in 2021, The Independent variable is SOARS Score, and the Dependent variable is Mortality Rate.

**Results:** Mortality rate increased in patients with High SOARS Score (>3), with mortality 67 out of 73 patients (91,7%) with result (OR = 4.12; 95% CI 1.65 - 10.3; p-value 0.001). Then from the SOARS Score itself, the significant thing in increasing mortality rate was critical SpO<sub>2</sub> ≤92% with (OR = 2.32; 95% CI 1.11 - 4.84; p = 0.022) and high respiratory rate >24x/minute with (OR = 2.06; 95% CI 1.04 - 4.06; p = 0.035).

**Conclusion:** There is a correlation between SOARS Score and mortality in Severe and Critical Covid-19 patients. SOARS score >3 have a significant correlation with higher mortality (OR = 4.12; 95% CI 1.65 – 10.3; p value 0.001).

**Keywords:** Severe and Critical Covid-19, SOARS score, Mortality Rate, Retrospective Cohort Study