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## Critical Care

**SESSION TITLE:** Critical Care Posters

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### VALIDATION OF SOFA SCORE IN CRITICALLY ILL PATIENTS WITH COVID-19

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**PURPOSE:** Multiple metrics like SOFA score, APACHE II, AND SAPS III have been validated to predict mortality in critically ill patients. However, there is limited data about the applicability and validation of the SOFA score in critically ill patients with COVID-19

**METHODS:** This is a retrospective cohort study aimed to evaluate and validate the applicability of SOFA score in critically ill patients with COVID 19. SARS-CoV-2 was diagnosed via PCR, and full SOFA score (6 system variables) was performed on days 1, 3 and 5 of critical care admissions with estimation of standard variation

**RESULTS:** A total of 125 with PCR confirmed SARS-CoV-2 infection admitted between March 9, 2020, to April 5, 2020 in a tertiary care center were identified and analyzed. In-hospital mortality or discharge to hospice occurred in 17% (9 and 13 patients respectively) of the population. A further analysis of 28 patients that required ICU care was performed with a subsequently mortality/discharge to hospice of 76% (18). A SOFA score was estimated at day 1, 3 and 5 with subsequent averaging among the 18 patients in which  $6 \pm 4$ ,  $8 \pm 5$ ,  $11 \pm 4$  points were obtain respectively. Patients who died where older in age (70 years), had multiple comorbidities (diabetes mellitus, coronary disease). Among predictors of poor outcomes we found any increase in the SOFA score over 48 hours, and a total of 11 points at day 1. A linear correlation was suggested among SOFA and ICU mortality

**CONCLUSIONS:** An increase on SOFA score in the first 48 hours after admission is associated with a significant ICU mortality in critically ill patients with COVID-19. These correlate with similar findings in no COVID19 patients. Thus, suggesting that SOFA score is an excellent tool to predict mortality in critically ill patients with COVID 19

**CLINICAL IMPLICATIONS:** As normal SOFA Score this information can be used to provide the family with prognosis, and clinical trials to improve decision making and quality of care.

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