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**OUTCOME OF CHRONIC KIDNEY DISEASE PATIENTS WITH SARS COV-2 INFECTION- A SINGLE CENTRE EXPERIENCE**

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**BACKGROUND AND AIMS:** Since the outbreak of COVID 19 there have been 88.1 million confirmed cases and 1.9 million deaths in 218 countries, while in Serbia we have had 39.867 cases of COVID 19 and 3479 deaths with approximate death rate of 1%. Fatality rate worldwide vary widely, from 0% in Singapore to 8,8% in Mexico with the average value of 3%. Although there are many published studies about COVID 19, influence of chronic kidney disease and chronic dialysis on outcome of patients with the coronavirus infection is still not clear. The aim of this study was to explore whether the presence of CKD including ESRD and chronic dialysis treatment increases COVID 19 patients' risk for adverse clinical outcome.

**METHOD:** This retrospective study included 88 patients who were hospitalized at the Nephrology department in Zvezdara University Clinical Center which was transformed into a COVID hospital at the time. These patients were treated from 01.04.2020. to 01.06.2020. and 37 (42%) of them had CKD, while 51 (58%) had no signs of kidney disease. We analysed data collection from the patients' history, including age, sex, comorbidities, symptoms, blood and radiology findings, therapy and outcome. We compared outcome (fatal and need for mechanical ventilation) between CKD and non CKD group and also analyzed dialysis as a risk factor for adverse outcome. Statistical analysis has been performed using SPSS software version 20 and OR was calculated using Logistic Regression.

**RESULTS:** We analysed 88 patients, a mean age of 62+15 years, 59.1% males. Out of 88 patients, 37 had CKD, while 27 of them were on hemodialysis and 2 on peritoneal dialysis (CAPD). At the end of follow-up, 46 patients (52.3%) was discharged home, 27 (30.7%) was transferred to another hospital and 14 (15.9%) died. Regarding influence of CKD on COVID-19 patients' outcome it was shown that patients with CKD had 3-fold higher chances for discharge than for the fatal outcome ( $p=0.05$ ) and 4-fold less risk for use of the mechanical ventilation (ns) as compared to non CKD patients. We also found that ESRD and chronic dialysis affect outcome with statistical significance ( $p=0.01$ ) in a way that it doubles the risk for the adverse outcome.

**CONCLUSION:** Patients with CKD, especially those with ESRD had significantly higher risk for the lethal outcome and higher chances to require the mechanical ventilation.