# Evaluation of Epidemiology, Clinical Features, Prognosis, Diagnosis and Treatment Outcomes of Patients with COVID-19

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## Abstract

Background: COVID-19 is considered a widespread concern in global public health. Diagnoses of COVID-19 in some cases are necessary due to severe prognosis. In this study, clinical and demographic characteristics of patients with COVID-19 were studied in Taleghani Hospital, Urmia, Iran. Methods: This descriptive-analytical cross-sectional (retrospective) study carried out on 215 patients with COVID-19 during March and April 2020.. Approved COVID-19 case was considered as a person with a positive respiratory sample performed by at least one of two RT-PCR methods or genetic sequencing. Results: The mean age of patients was 50.93±17.92 years. The mean hospital stay, the temperature at admission, and onset of symptoms were 4.91±3.68 days, 37.40±0.96 0C, and 5.88±4.80 days, respectively. Shortness of breath and cough were found in 62.8 % and 49.3 % of patients. Regarding lung involvement, 33 patients (33%) were normal, most of the patients (n=71) had 5-25% involvement in their lung and a minority of patients (n=13) had a severe condition of 50-75% lung involvement. .Spo2 can increase the risk of death by 16% with each unit reduction. Kidney involvement increases the chance of mortality by 1.386 times (95% CI: 11.010-2.704). Hemoglobin was also significantly marginal, with a 35% risk of death per unit reduction in blood hemoglobin, which is a very important finding in this study. The odds ratio of spo2 and hemoglobin for mortality due to COVID-19 was 1.16 (95% CI: 1.073-1.262) and 1.350 (95% CI: 0.989-1.842), respectively. Conclusion: COVID-19, like other viral diseases, can involve different organs of the body with different severity. In the meantime, smoking was not a risk factor for the virus or associated with severe manifestations of the disease. Patients with high creatinine and CPK, pulmonary involvement above 25%, and hypoxemia had a higher mortality

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