

Determining the effective factors on mortality of patients with Covid-19 in Imam Khomeini Hospital in Ardabil

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Background: Coronavirus infection started in late 2019 and early 2020 in Wuhan, China, with a large number of people being infected, leading to high mortality. This study was performed to determine the factors affecting the mortality of patients with Covid 19 in Imam Khomeini Hospital in Ardabil.

Method and Materials: In this cross-sectional study, the case of patients with Covid 19 who were hospitalized in Imam Khomeini Hospital in Ardabil between April 2016 and the end of June 2016 and died of this disease was examined. For these individuals, a checklist containing demographic information including age, sex, underlying disease, vital signs, oxygenation status, state of consciousness and the presence of organ failure was completed. Then, the relationship between each variable and mortality was analyzed based on logistic regression test.

Results: Out of 1152 patients who were hospitalized due to Covid 19 during this three-month period, 150 patients died. The mortality rate in this study was 13.02%. The mean age of the deceased patients was 15.02 66 66.89 years and 54% of the deceased were women. 89% of the dead were hospitalized in the intensive care unit. Hypertension (56.7%) was the most common underlying disease, followed by diabetes and heart disease. 42.7% of them had a history of smoking. The results of regression test showed that the presence of chronic kidney disease, chronic lung disease, cancer, hemodynamic instability and smoking is associated with an increased risk of mortality.

Conclusion: COVID-19 disease is related to the demographic status of individuals. The cellular immune system, the most important arm of the immune system against viral infections, is weakened in the elderly. Therefore, with advanced age, the presence of an underlying disease can help physicians to identify patients with a poor prognosis in the early stages.

Keywords: Covid-19; Mortality; Iran