

## **Abstract**

**Background:** Corona virus disease 2019 (Covid-19) was first reported as a number of cases of pneumonia with unknown origin in Wuhan, China. The cause of this disease is severe acute respiratory syndrome virus 2 (SARS-CoV-2). Due to the rapid spread of the COVID-19 disease in Iran, the increase in the number of patients in a short period of time and the limitation of available hospital beds, some patients admitted to hospitals with minor clinical symptoms, mild CT-Scan changes and improvement of vital signs, even though the results They had a negative PCR, they were discharged from hospital within a few days with the clinical judgment of the doctor.

**Aim:** This study seeks to investigate clinical and laboratory findings in PCR positive and negative patients with covid 19 hospitalized in Imam Khomeini Hospital, Ardabil.

**Materials and Methods:** This study is a retrospective comparative cross-sectional study that was conducted in 2019 in PCR positive and negative patients with covid 19 hospitalized in Imam Khomeini Hospital (RA) in Ardabil. Symptoms, mortality and other findings were compared in two groups of PCR positive and negative infected with corona. To compare the results between the variables between the two groups, t-tests were used. Chi-square test was used to compare the qualitative (class) variables. The significance level in all tests (P value) was considered less than 0.05. Written consent was obtained from all patients before entering the study.

**Results:** A total of 316 people were included in the study, of which 227 people (71.8%) had positive PCR results and 89 people (28.2%) had negative test results. 157 subjects (49.7%) were male and 142 subjects (44.9%) were female and the gender of 17 subjects was not available. There were no significant differences between the groups in terms of age and gender. In terms of underlying disease, myocardial infarction ( $P=0.023$ ) and diabetes ( $P=0.044$ ) were seen more in the PCR positive group, but there was no difference between the groups in terms of other underlying diseases. In terms of clinical symptoms, shortness of breath was more in the group with a positive test than in the negative group ( $P=0.033$ ), but there was no difference between the two groups in terms of other symptoms. Death in the group with a positive test was more than the negative group. ( $P=0.00$ )

***Conclusion:*** In terms of clinical symptoms, shortness of breath was seen more in the group with a positive test, and mortality was also higher in this group. Also, the probability of a positive test was higher in the male group.

***Key words:*** Covid-19, PCR, acute respiratory distress syndrome