Determining the Predictors of Covid-19 Disease Based on Data from Fars Province

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Abstract

Background: The coronavirus disease 2019 (COVID-19) is rapidly spreading worldwide and becoming a pandemic. Since the diagnostic tests are relatively expensive, simple diagnostic tests are valuable for quarantining individuals suspicious of COVID19. This study is designed to predict the potential contributing factors of COVID-19 diagnosis. Methods: It was a referral-based historical cohort study. 363358 individuals referred to the health centers from February to November 2020 in Fars province were entered in the study. The collected data before the lab test were symptoms, underlying diseases, some conditions, risk factors, and demographic information. The Reverse transcriptase polymerase chain reaction test was performed to identify the COVID-19 virus. Chi-square and T-tests were used to compare the variables. A logistic regression test was used to identify predictor variables. Results: Positive COVID-19 test was reported for 119,324 (% 34.9) participations. The positive group result was compared with that of the negative group (n=244,034). The studied symptoms were significant in positive patients. According to the odds ratio (OR), smell disorder (OR=3.80, P