Evaluation of Clinical Manifestations Reported by the Public through Telephone Counseling of the Iran Health Insurance Organization in the Early Period of the COVID-19 Epidemic

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ABSTRACT

Introduction: The coronavirus disease 2019 (COVID-19) as a global pandemic has become a burden on the healthcare system of many countries worldwide, including Iran, and caused more than a million deaths by the end of 2019. Therefore, this study aimed to identify the symptoms of COVID-19 in Iranian people to reduce the spread of the disease and manage it.

Methods and Materials: Using the census method, we conducted cross-sectional analyses of 12125 people calling for COVID-19 screening from 2 March 2020 to 19 April 2020. A telephone number was given to people for consulting with more than 70 nurses, and 30 medical doctors were responsible for considering the first- and second-level questions. Subsequently, a checklist of COVID-19-related symptoms was filled out for each participant. A chi-squared test and univariate logistic regression with SPSS 25 were used for statistical analysis.

Results: Of the 12125 participants in this study, 43.5% were male, and their mean age was 37.76 ± 16.61 years. The most common symptom was cough (41.3%), followed by shortness of breath (32.8%) and fever (31.5%), which was more prevalent among men. The least common complaint reported was confusion (1.6%). Our study revealed that men were at a higher risk of COVID-19 than women (OR: 1.31; 95% CI: 1.10-1.55; *p* = 0.002). Also, positive relationships were found between fever, chills, sore throat, shortness of breath, cough, body aches, and gastrointestinal symptoms with COVID-19.

Conclusion and Discussion: Our study revealed that cough, fever, and shortness of breath are the most common symptoms in people calling for COVID-19 consultation. It suggests that telehealth practices must be optimized more effectively in future crises.

Keywords: COVID-19, Iran, Risk factors