

Clinical Manifestation and the Risk of Exposure to SARS-CoV-2 (COVID-19)

The new coronavirus that scientifically has been named SARS-CoV-2 would result in coronavirus disease (COVID-19). It has drawn much attention to itself in the world; consequently, the World Health Organization (WHO) announced in a statement that the outbreak of the virus was a cause of public health emergencies around the world.^[1] The outbreak of COVID-19, the novel coronavirus, was first begun in Wuhan, China, with widespread. Due to the increasing prevalence of the disease in more than 120 countries, the WHO has declared a global epidemic on March 21.^[2,3] The virus that causes COVID-19 has been identified as acute respiratory syndrome coronavirus (SARS-CoV-2). In phylogenetic analysis, the virus belongs to the same sex as the Mercury and SARS virus. Pneumonia is the most common manifestation of COVID-19 infection in the early stages characterized by fever, cough, shortness of breath, and bilateral infiltration in chest imaging. Also, in acute cases, it can lead to fatal lung injury and death.^[4,5] The results of a study showed that ACE2 is an important SARS-CoV receptor that keeps safe the lungs from harm or damage. ACE2 is a membrane aminopeptidase that is presented in various human tissues consisting of the vascular endothelial, respiratory tract, small intestine, cardiovascular, and renal systems.^[6] According to the latest meta-analysis study on 50466 patients with COVID-19, the death rate has reached 4.3%. However, most people who have died had previous underlying diseases, such as hypertension, diabetes, or cardiovascular disease, which weakened their immune systems. The results of this study showed that fever, cough, muscle pain, or fatigue were the most common clinical symptoms in these patients. In addition, acute respiratory distress syndrome and abnormal chest radiography were seen in 14.8% and 96.6% of the cases with COVID-19, respectively.^[7] The studies have shown that people with underlying diseases are at greater risk for complications and deaths from COVID-19. Approximately, 50% of hospitalized patients with suspected new coronavirus have other chronic illnesses and about 40% of hospitalized patients with confirmed new coronavirus infection (SARS-CoV-2) have cardiovascular or cerebrovascular diseases.^[8] Since the coronavirus outbreak, some cases have been seen in children and adults with severe symptoms varying across.^[9] The primary death cases by COVID-19 occurred in older adults, possibly due to the weak immune system that allows the faster progression of the viral infection.^[10,11] According to the results of another study, among 1099 patients with laboratory-confirmed COVID-19, the patients who had at least one comorbidity disease, such as hypertension, coronary heart disease as well as diabetes were involved the most common cases. In this study, 223 patients had hepatitis B infection; severe

cases were more likely to have hepatitis B infection than non-severe cases. Abnormal liver function tests, including elevated aspartate, alanine aminotransferase, total bilirubin and aminotransferase were noted.^[12] Although COVID-19 occurs in everyone and is likely to be transmitted person-to-person, some reports suggest that most people with underlying disease or immunodeficiency are at greater risk. However, for all suspected patients and individuals, respiratory precautions of the droplets, along with standard precautions, are essential.

Ethical considerations

Ethical issues (including plagiarism, data fabrication, double publication) have been completely observed by the authors.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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Received: 23 Mar 20 **Accepted:** 10 Apr 20

Published: 09 Jul 20

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Med 2020; Published on February 28, 2020, and last updated on March 6, 2020, at NEJM.org. DOI: 10.1056/NEJMoa2002032.

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Quick Response Code: 	Website: www.ijpvmjournal.net/www.ijpm.ir
	DOI: 10.4103/ijpvm.IJPVM_145_20

How to cite this article: Alebrahim-Dehkordi E, Reyhanian A, Hasanpour-Dehkordi A. Clinical manifestation and the risk of exposure to SARS-CoV-2 (COVID-19). *Int J Prev Med* 2020;11:86.

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