



# Iranian Journal of Medical Microbiology

## Special interview with Infectious Diseases Specialists (IDS) of COVID-19 patients in intensive care unit (ICU)

Mohammad Darvishi, Maziar Zahir

Due to the epidemic and the wide prevalence of coronavirus, to get more information about how to deal with coronavirus, we decided to have a special interview with Dr. Mohammad Darvishi, a specialist in infectious diseases, and the medical staff of Besat Hospital of the Islamic Republic of Iran and his student, Dr. Maziar Zahir. Let's talk about the corona virus. While infinitely honoring and thanking the medical staff of the country, we wish them and their colleagues all over the country and this world infinite health and happiness.

Thank you very much Dr. Mohammad Darvishi and Maziar Zahir for accepting our invitation and giving us your precious time.

### **1. Dear Dr. Mohammad Darvishi and Dr. Maziar Zahir, would you please kindly introduce yourself.**

Hello, I am Dr. Mohammad Darvishi, Associate Professor and member of the Infectious Diseases and Tropical Medicine Research Center at the Faculty of Aerospace and Surface Medicine, University of Medical Sciences, Army of the Islamic Republic of Iran.

Hello, I am Maziar Zahir, a final year general medicine student at Tehran Azad University of Medical Sciences and one of the interested parties in the field of COVID-19 research.

### **2. How do we know if we have been infected with the corona virus? What are the symptoms based on the latest cases? What are the symptoms of most clients?**

In many patients, there are no signs. This is one of the reasons for the widespread prevalence of the disease. In symptomatic patients, the range

of symptoms and their severity is very wide and affects many organs of the body, including the respiratory, gastrointestinal, blood clotting, cardiovascular, and renal systems.

The most common symptoms at the moment are cough, fever and chills, shortness of breath and chest pain, sore throat, decreased sense of smell and taste, nasal congestion and runny nose, heartburn, nausea and vomiting, diarrhea, Muscle aches, headaches and unexplained weakness and lethargy.

### **3. Has the COVID-19 symptoms in Iranian patients changed from respiratory to gastrointestinal?**

No, the majority of patients with acute respiratory symptoms still go to the hospital emergency department, and this group generally has much more serious clinical conditions. Unfortunately, one of the reasons for the increase in the rate of disease transmission was the misconception about changing the symptoms of patients from respiratory to gastrointestinal, which made the disease simplified by many compatriots.

### **4. Please explain about the symptoms at different ages and are the symptoms different depending on the age and gender of the patients?**

The range of symptoms listed above is more or less the same in all age groups. The disease usually occurs in children and adolescents with mild to moderate severity and this group has few clinical symptoms; However, with increasing age and the prevalence of comorbidities, the severity of the disease generally increases. Among the most dangerous risk factors are:



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Age (over 65), Male, Chronic renal failure, Chronic obstructive pulmonary disease (COPD), Type 2 diabetes, Immune deficiency due to solid organ transplantation, Underlying malignancy, Obesity, Heart problems, Sickle cell disease and Smoking, especially cigar .

Studies show that asthma and pulmonary fibrosis also increase the risk of developing severe disease to some extent. It should be noted that high blood pressure has not been confirmed as a definite risk factor. People with one or more of these risk factors are more likely to develop severe forms of the disease, and in this group, severe respiratory symptoms such as severe shortness of breath, chest pain, and respiratory failure are more common. On the other hand, as mentioned above, men are at greater risk for more severe types of disease.

One thing that remains to be said about children and adolescents is that sometimes children and adolescents under the age of 20 develop a severe form of the disease that presents with fever, skin lesions or eye inflammation, cardiovascular complications, hypotension, coagulation disorders, and it presents with severe gastrointestinal complications and is known as "multisystem inflammatory syndrome". This group, despite their young age, generally need to be admitted to the intensive care unit.

## **5. What should we do if we get the Corona virus? How long should the symptoms last before we see a doctor or refer to a health center?**

Generally, if you have symptoms of fever above 38 degrees Celsius, cough and shortness of breath, you should consult your doctor. Of course, as mentioned above, in many people, the disease manifests itself with symptoms such as decreased sense of taste and smell, sore throat, anorexia and diarrhea and vomiting, headache and dizziness. It is recommended that you see your doctor immediately if you notice any of the above symptoms, especially respiratory symptoms.

Early referral, especially in elderly patients with the above-mentioned risk factors, is very important because the possibility of exacerbation of the disease and it becoming out of control in this group is much higher.

## **6. Which medical centers should we refer to? Many people go to a general practitioner, should they go to a specialist or a specific medical center?**

If the patient has severe respiratory symptoms including shortness of breath, chest pain, and severe cough, it is best to go to a well-equipped emergency center because more laboratory, imaging, and treatment facilities are available there. Also, in case of severe gastrointestinal symptoms such as severe and persistent diarrhea and vomiting, it is recommended that the patient be referred to an equipped hospital. In cases of severe diarrhea and vomiting in children, it is necessary to go to the above hospital. Finally, it should be noted that the patient who has symptoms of severe headache or dizziness is also better to go to the hospital.

For patients who do not have the above severe symptoms, are young and do not have underlying diseases, it is enough to see a general practitioner and they will refer the patient to better equipped centers for further diagnostic and treatment stages if necessary.

## **7. What is the duration of self-quarantine or how long should the minimum quarantine period last?**

According to the World Health Organization, at least 10 days should have passed since the onset of symptoms, and after that the patient should have no respiratory symptoms and fever for 3 full days (without the use of painkillers and fever-reducing drugs). Is. In cases of asymptomatic disease, 10 days of quarantine is sufficient.



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## **8. What food advice do you give during quarantine? Is there a difference between consuming food?**

Although no food has been discovered to treat this disease so far, proper nutrition is one of the pillars of patients' recovery. Patients' diet should be rich in protein, vitamins and minerals. It is recommended that patients eat all foods, especially fresh fruits and vegetables. Reduce their salt and sugar intake as much as possible and use small to moderate amounts of oil in their meals.

It is also strongly recommended to use plenty of drinking water and natural juices without added sugar and other liquids without artificial sugar. It should be noted that patients should refrain from using any separate alcoholic beverages.

## **9. How do we know that the symptoms are dangerous during quarantine?**

The most reliable method is to prepare a mobile pulse oximeter, by which the patient can measure his oxygen saturation level several times a day, and if the oxygen saturation number falls below 93%, he should immediately go to an equipped medical center. In the case of symptoms, exacerbation of previous mild symptoms or new symptoms is an alarm that the patient and those around him should pay close attention to; For example, the onset of shortness of breath, chest pain, severe and persistent cough, abdominal pain, severe and uncontrollable diarrhea and vomiting, severe weakness and lethargy, and severe headache and dizziness should be taken seriously and the patient referred to an equipped health center for further examination. Slowly.

## **10. In many people, the symptoms return for several days in a row, is this normal? For example, after a few days of recovery, fever, bruising, sweating, and sometimes severe diarrhea and other symptoms return, and after a few days, the body returns to normal and after a few days, this cycle continues?**

## **Are these conditions normal? How long does this condition usually last?**

As you mentioned, reduction and exacerbation are seen again in some patients, and in many cases the systems involved in the disease change, for example, gastrointestinal and respiratory symptoms are very common in the patient. It is necessary for the patient and his companions to know the danger symptoms mentioned above and in case of any of the above-mentioned danger symptoms, to go to an equipped medical center immediately. Regarding the duration of the disease and the symptoms, as mentioned, most patients recover within two weeks. However, in many weak and lethargic patients, the symptoms persist for a long time after recovery.

## **11. How do we know we have improved? What specific symptoms should be eliminated?**

In general, according to the World Health Organization, the disease has passed 3 days after the onset of obvious symptoms; has improved. The most important of these symptoms is fever cessation (without the use of painkillers and antipyretics).

## **12. In some cases, after more than a few months, the sense of smell or taste of the improved people has not returned. Does it have a specific duration? Was there anything about this in your collection that has yet to return?**

According to studies, no cases of irreversible damage to the sense of smell or taste in patients have been reported so far. In most patients, these symptoms improve to a great extent after the acute period of the disease (about the same 14 days), although complete recovery may take several months.

To accelerate the improvement of the sense of smell, you can use roses, lemons, eucalyptus and cloves, each for 10 seconds, twice a day for 12 consecutive weeks.



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**13. In the progress and improvement of patients, has there been any success in prescribing drugs available in the market or internal medicine in patients? Please explain.**

Numerous research teams and capabilities around the world are currently exploring possible treatments; Unfortunately, no specific drug has been found to prevent the virus from multiplying, however, relatively promising results have been obtained for an antiviral drug (RemedSivir). At present, the basis of hospital treatment is adjuvant oxygen and injectable corticosteroids, although it is important to note that corticosteroid injections should only be performed in a hospital setting under the supervision of a specialist and in the case of outpatients and inpatients at all. is not allowed.

**14. What vaccines are currently available? Do you have any advice on vaccination?**

Currently, several countries and companies claim to make effective and efficient vaccines, including modern vaccines, Pfizer, Sinovac, etc. In our country, a prototype of the vaccine has been prepared and is undergoing further research and possible production on an industrial scale. At present, none of these vaccines have received the final approval of the Food and Drug Administration of the Ministry of Health of Iran. The general recommendation is that as soon as a valid and approved vaccine is available, everyone should be vaccinated according to set priorities.

**15. In the end, what if there was a question we did not ask you? And what advice and items do you consider necessary in the current situation?**

The only thing left is the strict recommendation to follow the hygienic protocols, including regular use of masks (preferably standard surgery), frequent washing of hands with soap and water, and frequent disinfection of hands with alcoholic disinfectants, avoiding crowded and closed places, avoid Gatherings and parties and not

being in crowded public places as much as possible. Finally, while thanking you for your interview, we wish all our dear compatriots and patients around the world good health.

You can also see the report of "Coronavirus Special Dialogue" in the Persian section of the Iranian Journal of Medical Microbiology ([link](#)).