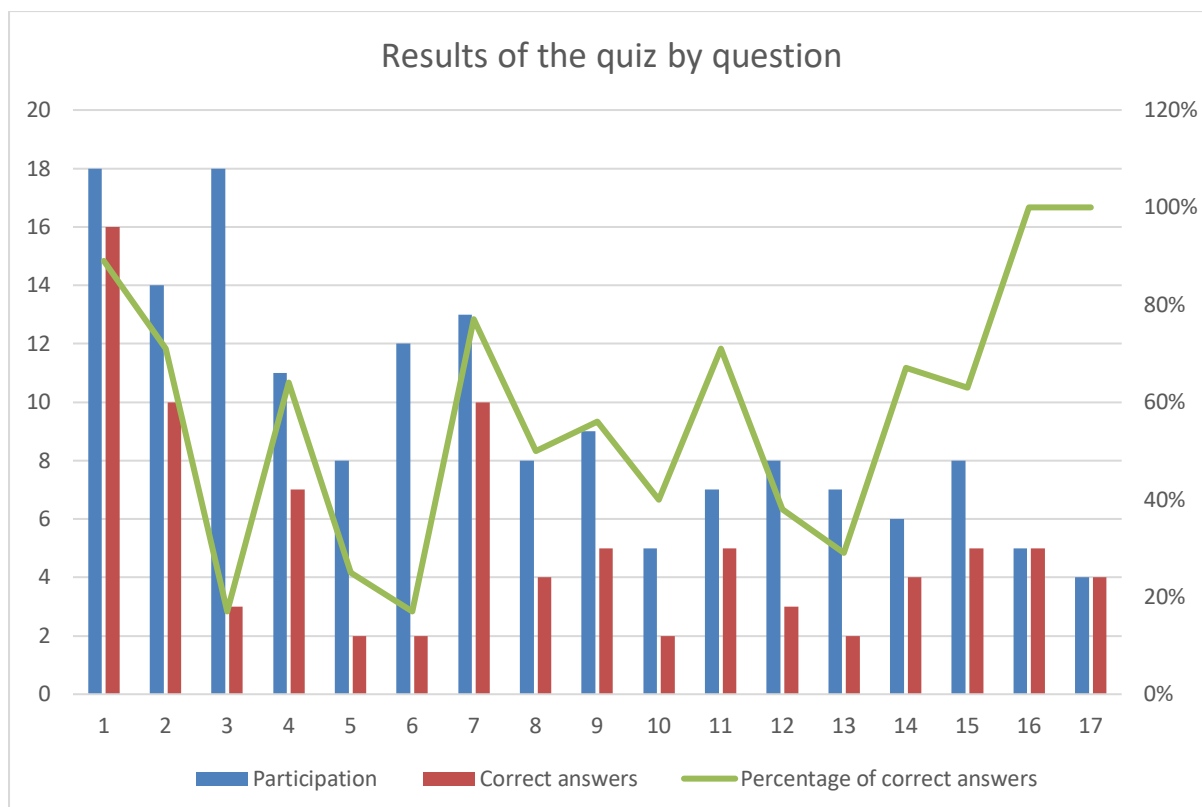


## Questions, answers, explanations and evaluation of the Covid-19 quiz administered by DIFAEM

You can read the entire quiz again here and see to which extent the participants answered the questions correctly. We are listing all the quiz questions with answers and explanations. The number of participants and the percentage of correct answers are also displayed. In the following graphic you can see all questions and the related participation, the correct answers and the percentage of correct answers. You can see that quite a number of participants did not find the correct response. Therefore, we are inviting you to read the quiz and the explanations for each question again.



### Quiz on Covid-19: 1

#### How is SARS-CoV-2 (the virus that causes Covid-19) commonly transmitted?

Through contact with the blood of an infected person

**Through direct person-to-person respiratory transmission**

Through a smear infection

Direct person-to-person respiratory transmission is the primary means of transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It occurs mainly through close-range contact (i.e. within approximately six feet or two meters) via air droplets. The virus is released in respiratory secretions and aerosols when an infected person coughs, sneezes, or talks. Another person is then infected through inhalation.

While SARS-CoV-2 RNA has been detected in non-respiratory specimens (e.g. stool, blood), neither fecal-oral nor blood-borne transmission appear to be significant sources of infection. Also, contaminated surfaces are not thought to be a major route of transmission. But there is a possibility of transmitting Covid-19 through the hands. Touching the nose and then shaking hands, for example, may contribute to the transmission.

Participants: 18

Percentage of correct answers: 88%

<b>Quiz on Covid-19: 2</b>
<b>What is "Long-Covid"?</b>
A Corona pandemic that lasts more than two years
<b>Symptoms that develop during or after acute Covid-19 illness and continue for more than 2 months</b>
An acute Covid infection where the patient expels active virus for more than two weeks
"Long-Covid," also referred to as post-Covid condition or post-Covid syndrome describes a set of persistent physical symptoms following an acute Covid-19 infection. These symptoms include among others fatigue, dyspnea, chest pain, and cough. Headache, joint pain, loss of taste or smell, muscle pain and diarrhea have also been reported. Common psychological and cognitive symptoms include poor concentration, insomnia, anxiety, and depression. Before diagnosing "Long Covid", other potential reasons for these conditions should be ruled out. Therefore a thorough medical check-up is needed.
Participants: 14
Percentage of correct answers: 71%
<b>Quiz on Covid-19: 3</b>
<b>How can we distinguish Covid-19 from other respiratory diseases?</b>
Through testing
<b>A lot of Covid-19 patients lose taste and smell for a certain time</b>
Covid-19 patients show a very specific type of cough
The clinical features of Covid-19 overlap substantially with influenza and other respiratory illnesses. The symptoms include fever, a sore throat, sinusitis, cough, fatigue, headache, muscle pain, diarrhoea which also occur during an infection with a virus that causes a common cold or the influenza virus. A more specific symptom is the loss of taste and smell which occurs temporarily in some patients with Covid-19. The best way to distinguish Covid-19 from any other respiratory infection is antigen testing either with a rapid test or a PCR test.
Participants:18
Percentage of correct answers: 17%
<b>Quiz on Covid-19: 4</b>
<b>With which medication can severe cases of Covid-19 be treated?</b>
<b>Dexaméthasone</b>
Hydroxychloroquine
Ivermectin
There is currently a lot of research ongoing on new medication and existing medicines and their suitability to treat severe cases of Covid-19. This research is focussing on anti-retroviral medicines, cardiovascular medicines, immunomodulators, medicines for lung function and medicines for Long Covid. Please note that every country has its own list of approved and available medicines. A common treatment option is Dexamethasone. It helps to prevent an excessive inflammatory immune response also called cytokine storm. Please note that this medication should only be administered in severely sick patients who may need intensive care. In these cases Dexamethasone should be given as follows: 6 mg Dexamethasone orally/IV once daily in the mornings. Also other cortison-based medicines like Hydrocortisone (50mg IV every 8h, – 200mg once daily in the mornings for 7 days) or Methylprednisolon (40mg twice daily for 7 days) can be used. Hydrochloroquine has no effect on preventing hospitalization or death in severely sick patients with Covid-19 even though it has been listed as a recommended treatment in a number of countries. The side effects of Hydroxychloroquine may even harm patients. Also the worm medicine

Ivermectin has no benefit if used with Covid-19 patients. Antibiotics are not indicated unless there is a bacterial superinfection.

Participants: 11

Percentage of correct answers: 64%

#### **Quiz on Covid-19: 5**

### **What are the clinical presentations of Covid-19 in a mild case?**

**Dermatological manifestations**

**Neurological manifestations like loss of taste or smell**

**Symptoms of an upper and lower respiratory tract infection**

The typical clinical symptoms of mild cases of patients infected with SARS-CoV-2 are quite diverse. They most often remind of symptoms of a common cold or flu with fever, fatigue, cough, shortness of breath, myalgia, headache, sore throat and a congested nose. In addition, neurological manifestations like the loss of taste and smell have been observed in a lot of patients. Some patients also suffer from diarrhea and /or nausea. Even dermatological manifestations like morbilliform rashes or varicella-like eruptions are possible. The list of symptoms is constantly updated. The mild symptoms of patients infected with different variants of SARS-CoV-2 like Delta or Omicron do not differ substantially. An antigen test allows to differentiate Covid-19 from a common flu or another condition.

Participants: 8

Percentage of correct answers: 25%

#### **Quiz on Covid-19: 6**

### **What advice should we give to patients with known or presumed Covid-19 who are well enough to stay at home?**

**Just continue all household and community activities as before, if your health allows it**

**Try to separate from other household members and wear a mask to prevent expelling the virus**

**Stay in frequent contact with your health care provider so that you can seek support if symptoms become more severe**

In order to protect other family members from Covid-19, the patient should stay in a separate room in the house if this is possible. The patient should always wear a mask when he or she is in the same room with other family members. The patient should stay in contact with his/her healthcare provider for the monitoring of the symptoms, particularly the development of new or worsening dyspnea, which should prompt clinical evaluation and possibly hospitalization. Patients with mild or moderate symptoms benefit from rest, good nutrition and nonsteroidal antiinflammatory drugs (NSAID) such as Paracetamol or Ibuprofen. It is also beneficial for these patients to be given plenty of fluids.

Participants: 12

Percentage of correct answers: 17%

#### **Quiz on Covid-19: 7**

### **When do we talk about severe respiratory problems in a patient with confirmed Covid-19 infection?**

**SpO<sub>2</sub><90%**

**SpO<sub>2</sub> 91-96%**

**SpO<sub>2</sub> >96%**

An important sign to decide about the severity of a pneumonia is the oxygen saturation of the patient's blood. It is measured by using a pulse-oxymeter. Some Covid-19 patients do not realise the lack of oxygen which is called a "silent hypoxia". Therefore, measuring the oxygen saturation in

the blood is one of the most important diagnostic tools at hand in the assessment of Covid-19 cases.

Oxygen therapy should be started when a patient shows an oxygen level of below 94%. If oxygen is scarce, it should be reserved for patients with an oxygen saturation below 92%.

Participants: 13

Percentage of correct answers: 77%

### **Quiz on Covid-19: 8**

#### **When should we administer Dexamethasone?**

As a prophylaxis for all cases diagnosed with Covid-19

Only in mild cases of Covid-19

**Only in severe or critical cases of Covid-19 requiring oxygen therapy**

Dexamethasone is an anti-inflammatory medicine that reduces inflammation by mimicking anti-inflammatory hormones produced by the body. Therefore, Dexamethasone dampens the immune response of the patient. Why would we want to do this? A common reaction in severely sick Covid-19 patients is an immune system going into overdrive. The so-called cytokine storm harms the body's own organs. Dexamethasone is given to prevent such an unwanted immune reaction. It will only be given to severe or critical cases. As a rule of thumb: Every patient who requires oxygen, should also be given Dexamethasone (SpO<sub>2</sub> < 92 or breathing rate > 25).

Participants: 8

Percentage of correct answers: 50%

### **Quiz on Covid-19: 9**

#### **Which medication is effective against Covid-19?**

Hydroxychloroquine

**Corticosteroids like Dexamethasone with or without an IL-6 receptor blocker**

Ivermectin or Mebendazole

The treatment of Covid-19 cases is complex and depends on the severity of disease. Corticosteroids like Dexamethasone are readily available globally. WHO recommends the use of Corticosteroids for patients with severe or critical Covid-19. It should not be used in patients with non-severe Covid-19 due to its potentially harmful side-effects which may outweigh the potential benefits. It should be administered for up to 7 to 10 days orally or intravenously. The daily regimen of different corticosteroids:

- Dexamethasone: 6 mg once daily
- Hydrocortisone: 150 mg daily (e.g. 50 mg every 8 hours)
- Prednisone: 40 mg daily
- Methylprednisolone: 32 mg daily (e.g. 8 mg every 6 hours or 16 mg every 12 hours)

Interleukin (IL)-6 receptor blockers like tocilizumab or sarilumab in combination with corticosteroids can suppress the overreaction of a patient's immune system in the course of a Covid-19 infection. IL-6-R are associated with a lower 28-day all-cause mortality, but they are currently not easily available in resource-limited settings. They should be given as a one dose intravenous formulation over the period of one hour. Tocilizumab requires 8mg/kg.

Hydroxychloroquine was well known as an antimalaria medication, and it is used in the treatment of rheumatic disease and other autoimmune conditions. Therefore, the drug is widely available in African countries. Hydroxychloroquine has been included in the national treatment guidelines for Covid-19 in various countries. However, WHO neither recommends Hydroxychloroquine for prevention nor for treatment of Covid-19 patients. In more than 30 trials, Hydroxychloroquine neither reduced mortality of patients nor the need or duration of oxygen support. In fact, giving Covid-19 patients Hydroxychloroquine increases their risk to suffer from heart rhythm, blood and lymph disorders, as well as kidney and liver problems.

Ivermectin or Mebendazole are medications used to treat parasitic diseases. It is effectively used in the treatment of oncocerciasis. But so far, there is no benefit of treating Covid-19 patients with Ivermectin. According to WHO, Ivermectin should not be used outside of clinical trials for treating Covid-19.

Participants: 9

Percentage of correct answers: 56%

### **Quiz on Covid-19: 10**

#### **When should we give antibiotics to a patient with COVID-19?**

As soon as the patient is diagnosed with Covid-19

**Only if the patient shows signs of pneumonia due to a bacterial superinfection**

Covid-19 is a viral disease. Therefore, antibiotics do not help against the root cause of the disease, the virus SARS-CoV-2. However, in case of pneumonia due to a bacterial superinfection it will be necessary and helpful to give antibiotics. The WHO recommends the following medication:

1. Ceftriaxone 1–2 g once daily PLUS a macrolide (e.g. Erythromycin, Azithromycin or Clarithromycin). This is the preferred option

OR

2. Ampicillin 2 g IV 4 times a day PLUS a macrolide or Gentamicine

The macrolides should be given as follows:

- Erythromycin 500 mg 4 times a day

- Azithromycin 500 mg once a day

- Clarithromycin 500 mg twice a day.

If a macrolide is not available you can use Doxycycline 100 mg twice a day or an oral respiratory quinolone such as Levofloxacin. Please note that Doxycycline should not be given in pregnancy.

Participants: 5

Percentage of correct answers: 40%

### **Quiz on Covid-19: 11**

#### **Which effect does vaccination against Covid-19 have?**

**It reduces the risk of infection with SARS-CoV-2**

One shot protects you for a lifetime against Covid-19

**It reduces the risk of severe or critical Covid-19 disease**

Vaccination against Covid-19 reduces the risk of infection with SARS-CoV-2. Efficacy of the currently available vaccines is high against the Alpha, Beta and Delta variants when two doses of the vaccine are administered (except for Jansens from Johnson&Johnson requiring one shot). Against the Omicron variant, all currently available vaccines show a reduced efficacy. This efficacy can be increased considerably with a booster shot. However, all currently available vaccines reduce reliably the risk of severe disease, hospitalisation and death due to an infection with SARS-CoV-2, also in case of infection with Omicron. Therefore, vaccination remains the most important tool in the containment of the Covid-19 pandemic.

Almost all diseases require more than one shot of a vaccine to develop full protection. Some vaccines are fully effective after two doses like the measles vaccine, others require three or four shots like the vaccines against Tetanus or Polio. Some diseases even require annual vaccination like influenza. The Covid-19 vaccines are no exception in this respect. Since the Covid-19 vaccines are very new, scientists generate constantly new information on their efficacy. It is already clear that all currently available vaccines against Covid-19 lose efficacy over time. Therefore, a third and even a fourth shot is necessary to enhance the body's immune response.

Participants: 7

Percentage of correct answers: 71%

<b>Quiz on Covid-19: 12</b>
<b>How does the Omicron variant differ from the Delta variant?</b>
<b>Omicron shows differences in the spike protein</b>
<b>In contrast to Delta, Omicron affects more often the upper respiratory tract</b>
<b>Delta is more transmissible than Omicron</b>
<p>The Omicron variant has been first identified in the end of November 2021. Its spike protein differs from those of the former variants Alpha, Beta or Delta. With the spike protein, the virus connects to the healthy cell of a person and inserts its genetic information. The infected cell then starts producing virus cells. Due to an infection with a former SARS-CoV-2 variant or a vaccination with one of the currently available vaccines, a person can develop antibodies against the virus and specifically block the spike protein. Since Omicron has mutated spike proteins, it can sometimes evade the antibody response of an immunised person. A breakthrough infection despite vaccination or past infection may occur. However, the antibodies of an immunised person still manage to contain the replication of the virus, thereby preventing severe disease. Omicron remains more often only in the upper respiratory tract causing cold and flu-like symptoms. The Delta variant affects more frequently deeper lung and other organ tissue, thereby causing more severe disease outcomes and death due to lung and multi-organ failure. In contrast to Delta and all other former variants of SARS-CoV-2, Omicron is more transmissible. The transmissibility is captured by the effective reproduction value R. This R-value describes the estimated number of persons infected by one virus carrier. It is currently estimated to be 3.7 for Omicron meaning that one infected person will infect another 3.7 persons. The R-values for Delta and other earlier variants are far lower.</p>
Participants: 8
Percentage of correct answers: 38%
<b>Quiz on Covid-19: 13</b>
<b>Should we continue to recommend vaccination against Omicron with the currently available vaccines?</b>
<b>No, the currently available vaccines do not prevent infection with Omicron</b>
<b>Yes, because the vaccination prevents infection in some cases and severe disease in almost all cases</b>
<b>Yes, but we should advise patients that they have to get at least three shots</b>
<p>We have to continue recommending to our patients that they should get vaccinated with the currently available vaccines. It is true that the vaccines which are at our disposal at the moment are not as effective anymore in preventing infection with the new Omicron variant. Many breakthrough infections occur. But it is not true that they do not prevent a Covid-19 infection with Omicron at all. Many immunised persons do not become sick with Omicron due to their vaccination or a past Covid-19 infection. And the greatest asset of vaccination: Breakthrough infections do not lead to severe or critical disease. The vaccines do protect from hospitalisation due to Omicron-induced Covid-19. Therefore, a basic immunisation against SARS-CoV-2 remains a prudent step to be recommended even if the prevalence of Covid-19 is low in many countries on the African continent. For more information and to listen to our podcasts, please visit <a href="https://www.difaem-community.de/en/home">https://www.difaem-community.de/en/home</a></p>
Participants: 7
Percentage of correct answers: 29%
<b>Quiz on Covid-19: 14</b>
<b>What are common side-effects of a vaccination against Covid-19?</b>
<b>Pain, redness and swelling at the injection site</b>
<b>Fever, chills and muscle pain</b>

## Myocarditis and pericarditis

Side effects of the vaccines against Covid-19 are normal signs that the body is producing antibodies to build up a protection against the virus. Common side effects are pain, redness and swelling at the injection site. Some people also react with flu-like symptoms such as fever, chills, muscle pain, headache and tiredness. Others symptoms are possible as well. These side-effects are common after vaccination and disappear within a few days.

There are some very rare side-effects that have been reported and which are closely monitored:

- Myocarditis, the inflammation of the heart muscle, and pericarditis, the inflammation of the outer lining of the heart, in persons aged 30 years and younger after vaccination with the mRNA-vaccines of BioNTech-Pfizer or Moderna.

- Thrombosis with thrombocytopenia syndrome (TTS) after vaccination with J&J/Janssen or AstraZeneca. Women aged 30 to 49 years seem to be more at risk of this rare adverse effect. Vaccination against Covid-19 can rarely lead to adverse side-effects that also occur in the context of all other vaccinations. These are

- Anaphylaxis, a severe allergic reaction

- Guillain-Barré-Syndrome, an auto-immune response that damages nerve cells

All the described adverse side-effects occur very rarely. The risk of developing a severe form of Covid-19 is by far higher than one of the dangerous adverse reactions to the vaccines. Therefore, we should recommend vaccination to our patients along with proper information about the common and very rare side-effects. For more information and to listen to our podcasts, please visit <https://www.difaem-community.de/en/home>

Participants: 6

Percentage of correct answers: 67%

## Quiz on Covid-19: 15

### What should we keep in mind when attending to a tuberculosis patient in the Covid-19 pandemic?

#### TB patients carry a higher risk to develop a severe form of Covid-19

It is not possible for a TB patient to contract Covid-19 because he or she is immune against the virus

#### If a patient is co-infected with Covid-19 and TB, the tuberculostatic treatment should be continued by all means

Due to the Covid-19 pandemic, diagnosis and treatment of TB cases and especially treatment of multi-drug-resistant TB (MDR-TB) has decreased in the last two years. In 2020, the number of TB deaths have increased for the first time since 2005. It is highly necessary to continue TB diagnostics and treatment in the pandemic. Every patient suspected of TB should undergo diagnostics. Symptoms that are suspect of TB are: history of slow onset of feeling sick, with weight loss, night sweats, persistent fever and a productive cough that sometimes brings up sputum with bloody stains.

It is important to always have TB in mind when seeing a patient with respiratory problems. TB can be cured by giving antibiotics over a six to nine months' course using directly observed treatment (DOT).

A TB and Covid-19 coinfection is highly possible in regions with a high burden of tuberculosis. There is no evidence at all that the mycobacteria causing tuberculosis would render a person immune against the virus causing Covid-19. All the more: a tuberculosis infection increases the risk of developing a more severe form of a Covid-19 infection. To make it worse: the impact of Covid-19 on the immune system may lead to a faster progression of the tuberculosis. Therefore those patients urgently need anti-TB treatment.

If the patient suffers from a light form of Covid-19, he or she should stay at home and start or continue the DOT. More severe cases should be treated in hospital.

If a Covid-19 patient who has not been screened or tested for TB does not get better after two weeks and coughing and fever persist, the patient should undergo TB testing. For more information and to listen to our podcasts, please visit <https://www.difaem-community.de/en/home>

Participants: 8

Percentage of correct answers: 63%

### **Quiz on Covid-19: 16**

**Should we recommend Covid-19 vaccination for pregnant women?**

**Yes, because pregnant women have a higher risk to develop severe Covid-19 which will harm themselves and their babies**

Yes, but only after a pregnancy if she does not want to have another baby

No, the Covid-19 vaccines cause malformations in the newborn

Pregnant women carry a higher risk of developing severe Covid-19 which would harm them and their babies. Therefore, we should definitely recommend to a pregnant women to get the full course of vaccination even including the third booster dose. Growing evidence shows that the benefits of vaccination outweigh any potential risk of vaccination during pregnancy. Malformations of the newborn due to Covid-19 vaccination have not been observed. Covid-19 vaccination also does not cause fertility problems. For more information and to listen to our podcasts, please visit <https://www.difaem-community.de/en/home>

Participants: 5

Percentage of correct answers: 100%

### **Quiz on Covid-19: 17 en**

**Will any of the COVID 19 vaccines affect female fertility?**

**No. The Covid-19 vaccine causes the body to produce antibodies specifically against the Coronavirus spike protein and not against any other body cells.**

Yes, because due to vaccination the body produces antibodies that will negatively affect the growth and attachment of the placenta.

Receiving the COVID-19 vaccine will not affect female fertility. People actively trying to conceive may get all current COVID-19 vaccines without any consequences concerning their fertility. The American Society for Reproductive Medicine reports that there are no fertility-related issues connected with vaccination against Covid-19. Confusion arose when a false report was spread on social media, saying that the spike protein on the coronavirus that causes COVID-19 and the spike protein, syncytin-1, that is involved in the growth and attachment of the placenta during pregnancy are the same. The false report said that being vaccinated with the COVID-19 vaccine would cause the body to fight the Corona spike protein as well as the syncytin-1 spike protein and consequently affects negatively the growth and the attachment of the placenta after conception. The truth is, that these two spike proteins are completely different. The COVID-19 vaccine will not trigger antibodies that will destroy the syncytin-1 spike protein.

During Pfizer vaccine tests, 23 women volunteers in the study became pregnant. The only one in the trial who had a pregnancy loss did not receive the vaccine — she got a placebo. For more information and to listen to our podcasts, please visit <https://www.difaem-community.de/en/home> or <https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/the-covid19-vaccine-and-pregnancy-what-you-need-to-know>

Participants: 4

Percentage of correct answers: 100%