

# Differences Symptoms From Covid-19 And Common Cold: A Systematic Review

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**Abstract:** Covid -19 has mild symptoms which is like Common Cold and severe symptoms that same as like SARS and MERS. Common Cold itself has the main symptoms of fever, cough, myalgia, headache, nasal congestion, and sore throat. Because of this, many people are mistaken about the symptoms caused by Covid-19 and Common Cold. The aim of this research is to find out the different symptoms of Covid-19 and Common Cold. This study uses a method with literature review. Sources from the research were obtained by searching for national and international journals. Generally journals are indexed on Google Scholar, Elsevier, Science Direct, e-books, and others. Literature collected in accordance with the theme to be raised. This study shows the symptoms of Covid-19 and Common Cold have similarities, because both are diseases that attack the upper respiratory system. But Covid-19 symptoms themselves are moderate to severe and can be accompanied by shortness of breath, so it can causes ARDS (Acute Respiratory Disease Syndrome) which can lead to death. The laboratory test is a way to make a diagnosis to make sure the symptoms are caused by Covid-19 which is tested by reverse-transcription-polymerase-chain-reaction (RT-PCR) which results are positive on Covid-19. As for the Common Cold laboratory tests themselves are not required. The symptoms of Covid-19 and Common Cold have a similarity, because both are diseases that attack the upper respiratory system. Covid-19 can be enforced by laboratory testing while the Common Cold is not needed.

**Keyword:** Covid-19, Common Cold, Difference Symptoms

## 1. INTRODUCTION

In December 2019, an outbreak caused by the Corona Virus, Covid-19, in Wuhan, Hubei Province, China. On March 22, there were reported that more than one hundred countries around the world had 306,506 cases of Covid-19 and more than 12 thousand patients died due to this virus<sup>(1)</sup>. The first case of death was in a 61-year-old male with co-abdominal tumour and malnutrition in the liver<sup>(2)</sup>. Coronavirus is the main pathogen that attacks human respiratory system<sup>(3)</sup>. In this disease, it is reported that affected patients are on average of adults between 35-55 years and fewer cases are found in children and infants. Transmission of the virus is reported to be more vulnerable in people with low immunity especially the elderly or those who have kidney and liver dysfunction who are considered to be at high risk<sup>(3)</sup>.

Symptoms of Covid-19 are fever, cough, feel fatigue, shortness of breath, phlegm production, headaches, and myalgia. The severity of the infection depends on the asymptomatic carrier, starting from mild symptoms to severe symptoms until it can cause death. Patients with severe symptoms can experience respiratory failure, shock or multi organ dysfunction. About 80% of mild infections with symptoms such as common cold, 15-20% are in need of additional hospitalization and oxygen, and 5% are severe symptoms and require ventilation<sup>(4)</sup>.

Covid-19 has mild symptoms such as Common Cold and severe symptoms such as SARS and MERS<sup>(5,6)</sup> because the mild symptoms of Covid-19 are similar to the common cold symptoms. Many people are mistaken about their own situation and think they are exposed to Covid-19 but apparently only affected by the Common Cold, and vice versa.

Common Cold itself is a disease that attacks the upper respiratory system in humans. The most common viruses that cause common cold are rhinoviruses, influenza A and B viruses, parainfluenza virus and Respiratory syncytial virus (RSV)<sup>(7)</sup>. Common Cold is the most common disease in humans. Children are very susceptible to this disease because they have low immunity to the virus and also they have poor personal hygiene or often have close contact with other children who can transmit the virus<sup>(8)</sup>. The average incidence of Common Cold in preschool children is 5 to 7 per year, but 10% to 15% of children will have at least 12 infections per year. The incidence of the disease decreases with age and averages 2 to 3 per year as adults. This virus spreads through sneezing or coughing. The main symptoms of the Common Cold are fever, cough, myalgia, headache, nasal congestion, and sore throat<sup>(7,9,10)</sup>.

Seeing this problem, researchers are interested in examining what are the different symptoms of Covid-19 and Common Cold: Literature Review? The purpose of this study was to look at the differences in symptoms caused by Covid-19 and Common Cold.

## **2. METHOD**

This research uses a method with literature review. Sources from the research were obtained by searching for national and international journals. Generally journals are indexed on Google Scholar, Elsevier, Science Direct, e-books, and others. Literature collected in accordance with the theme to be raised.

## **3. RESULTS**

This study shows the symptoms of Covid-19 and Common Cold have similarities, because both are diseases that attack the upper respiratory system. But for Covid-19 the symptoms are moderate to severe and can be accompanied by shortness of breath, so that it can cause ARDS (Acute Respiratory Disease Syndrome) which can lead to death. The laboratory test is a way to make a diagnosis to make sure the symptoms are caused by Covid-19 which is tested by reverse-transcription-polymerase-chain-reaction (RT-PCR) which results are positive on Covid-19. As for the Common Cold laboratory tests themselves are not required.

## **4. DISCUSSION**

Covid-19 is a disease that attacks the upper respiratory system, thus making the symptoms caused similar to diseases caused by other viruses in the upper respiratory system, one of which is the Common Cold. Symptoms caused in Covid-19 and Common Cold patients have almost the same symptoms as fever, cough, fatigue, sputum production, headaches, and myalgia<sup>(4,10-12)</sup>. However, people infected with Covid-19 can be accompanied by symptoms of shortness of breath, so that Covid-19 can be categorized into 3 according to symptoms, namely: Mild symptoms that are marked by upper respiratory symptoms or have no symptoms at all,

mild pneumonia which is characterized by shortness of breath but there is no picture of pneumonia, severe pneumonia which is contained tachypnea until severe respiratory distress (oxygen saturation <90%), and Acute Respiratory Disease Syndrome (ARDS)<sup>(6)</sup>. Whereas Common Cold only has upper respiratory symptoms because Common Cold is an acute viral infection, "Self-limited" in the upper respiratory tract which can also involve the lower respiratory tract<sup>(8)</sup>.

Covid-19 has an incubation period of 14 days from the initial exposure to transmission through droplets, contaminated surfaces, and contacting the eyes, nose, or mouth that can cause transmission<sup>(3)</sup>. Common Cold itself has an incubation period ranging from 24 to 72 hours, while the average length of illness is one week. Common Cold can be transmitted through aerosols which have small particles (diameter <5 µm), which will infect when inhaled there are also large particles (diameter > 10 m), which infect when entering the nasal mucosa or conjunctiva or by direct transfer through hand contact hand-to-hand<sup>(8,11)</sup>.

To be able to ensure Covid-19 or Common Cold can be done based on history taking, physical examination and laboratory examination. Covid-19 can be confirmed by laboratory testing. Respiratory specimens showed positive results in real-time with the reverse-transcription-polymerase-chain-reaction (RT-PCR) test to detect positive nucleic acid SARS-CoV-2 in sputum in positive cases. Repeating to take the upper and lower samples, and the frequency of examination 2-4 days to get negative results as much as 2 times from the sample and also improve clinical conditions. If the case is suspected of meeting both criteria, it will experience fever, radiographic evidence of pulmonary infiltrate without improvement in symptoms after 3 days during antibiotic treatment, low or normal white blood cell count, low lymphocyte count, and travel to Wuhan or contact directly with previous Covid-19 patients<sup>(3,6,13)</sup>.

The diagnosis of Common Cold is based on the patient's clinical complaints and the judgment of the doctor, whereas routine laboratory examinations do not help with the diagnosis. Eosinophils may be useful if allergic rhinitis is suspected. Whereas the examination of polymorphonuclear leukocytes in nasal secretions is the characteristic of colds without complications and it does not indicate bacterial infections. Perhaps viral pathogens associated with the Common Cold can be detected by culture, antigen detection, PCR, or serological methods. Specific etiological diagnoses are only useful when antiviral treatment is used<sup>(9,14,15)</sup>.

Treatment for covid-19 is currently not specific or recommended. Handlers are only carried out in accordance with the symptoms that arise. If there is pneumonia, antibiotics are given and if there is shortness of breath can be given oxygen with saturation  $\geq 90\%$  but not higher than 96%. At present, vaccines for covid-19 are not yet available<sup>(3,12)</sup>. Treatment for common cold specific antiviral therapy is also currently not available while using antibacterial is not useful in handling common cold<sup>(9)</sup>.

Until now, the epidemic of Covid-19 has not stopped. So, to fight this deadly virus, WHO has devised strategies to cut off contact between humans and other humans, isolate patients at an early stage, identify and reduce transmission from animal sources, solve mysteries about the virus and accelerating research, communicating information correctly to the public and minimizing the social and economic impacts that occur and also the understanding of this virus for the basic mechanism of developing drugs for the Covid-19 virus<sup>(16,17)</sup>.

## 5. CONCLUSION

Based on the research results, it can be concluded that the symptoms of Covid-19 and Common Cold have a similarity, because both are diseases that attack the upper respiratory system. Covid-19 can be enforced by laboratory testing while the Common Cold is not needed.

## 6. REFERENCES

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