

An Overview On: Corona virus Disease and Its Myths Providing Factors Contributing To the COVID-19 Spread.

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ABSTRACT: The first incidence of the COVID-19 pandemic, which is spreading quickly, was discovered in Wuhan, Hubei Province, China, in December 2019. Due to the sharp increase in instances both in China and around the world. On March 11, 2020, WHO proclaimed COVID-19 to be a pandemic. The disease primarily damages the lung parenchyma and is spread through respiratory droplets produced by infected people while coughing or sneezing. Patients with COVID-19 can experience a wide range of clinical symptoms, from asymptomatic infections to fatally serious disease. Although COVID-19 patients most frequently experience respiratory dysfunction, the virus can also have an impact on other organ systems. This review examines the incidence of modern viral infections like SARS and MERS. In addition, the study will include a thorough analysis of the COVID-19 Pandemic.

Keywords: Covid ,2019-n COV, SARS-CoV-2, COVID-19, Pneumonia.

I. INTRODUCTION

China notified the World Health Organization (WHO) on December 31, 2019, regarding instances of pneumonia with an unknown cause found in Wuhan, Hubei Province, China. The viruses can cause ordinary colds and other minor respiratory infections in people, but they can also result in more serious conditions like pneumonia. The crown-shaped spikes on the surfaces of coronaviruses give them their name. The likelihood that older persons will become very ill from COVID-19 is higher. Deaths from COVID-19 affect adults over 65 in excess of 81% of cases. Deaths among those over 65 are 97 times more common than those among those between the ages of 18 and 29. In December 2019, Wuhan, China, reported an unidentified pneumonia cluster. Chinese officials released the sequencing of a new coronavirus called SARS-CoV-2, which was discovered from a few clustered cases, on January 12, 2020. The novel coronavirus disease has been

given the name "COVID-19" by the World Health Organization (WHO), and the virus that causes it is referred to as the "COVID-19 virus." Corona stands for corona, VI for virus, D for disease, and 19 for 2019, which was the year the outbreak was first noticed. People with severe COVID-19 may continue to be contagious after 10 days and may require a 20-day extension of seclusion. People who have a moderate or severe immune system impairment should stay isolated for at least 20 days. The first COVID-19 infection case to be reported in Kerala, India is presented here. A 20-year-old woman with a one-day history of a dry cough and sore throat visited the emergency room at the general hospital in Thrissur, Kerala, on January 27, 2020. There was no prior history of shortness of breath, rhinitis, or fever.

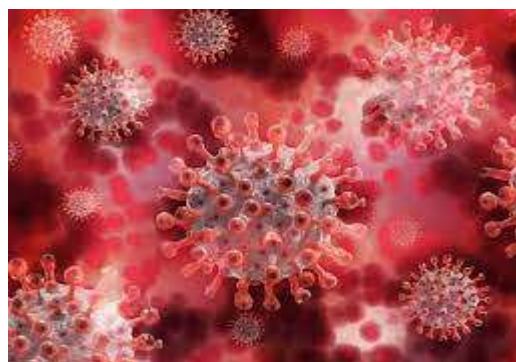


Fig 1: The Latest Image of Covid-19

The highest governing authority in China (the National People's Congress) temporarily outlawed all domestic wildlife trading and consumption on January 26, 2020, in reaction to the COVID-19 epidemic. Similar to an executive order issued in the United States, China's ban was implemented more quickly nationwide at all levels. Overall, China's actions amount to a significant and contentious initiative that is directed against a significant domestic industry. International conservation community applauded these actions, especially in light of China's

considerable involvement in the illegal wildlife trade, its effects on worldwide conservation, and the general need for legislative change in China's conservation policies. The wildlife breeding and commerce sector in China employed 14.1 million people as of 2016, with a market value of more than US\$80 billion and a number of legal loopholes and insufficient enforcement. As of 6:30 p.m. CEST on August 16, 2023, there were 769,774,646 confirmed cases of COVID-19 reported to WHO, including 6,955,141 fatalities. A total of 13,498,472,794 doses of vaccine have been given as of 12 August 2023.

Different researchers have obtained differing conclusions from electron microscopy study of negative-stained SARS-CoV-2 articles, although the virus's diameter has been determined to range from 50 nm to 140 nm. However, it has been claimed that human activity can produce small particles (5 m), known as droplet nuclei. It is possible that these particles are yet another way for different viruses to spread via the air.

Being knowledgeable about the illness and the virus's propagation is the best strategy to stop or slow down transmission. By keeping a distance of at least one meter between people, donning a mask that fits properly, and often washing your hands or using an alcohol-based rub, you can prevent infection in both yourself and other people. When it's your turn, get your vaccination, and abide by any local advice. When an infected person coughs, sneezes, speaks, sings, or breathes, the virus can spread from their mouth or nose in minute liquid particles. From larger respiratory droplets to tiny aerosols, these particles are diverse. It's crucial to use proper respiratory technique, such as coughing into a flexed elbow, and to confine yourself to your home and rest until you feel better.

Latest on corona virus disease 2019 (covid-19) pandemic

WHO said defend your surroundings and yourself by:

As soon as it's your turn, get vaccinated, and heed local immunization recommendations.

1. Keep your physical distance from people at least one meter, even if they don't seem to be ill
2. Avoid being in close quarters and crowds.
3. When physical separation is not possible and in places with poor ventilation, wear a mask that is correctly fitting.



Fig 2 : COVID-19 Response

4. Use soap and water or an alcohol-based hand massage to routinely wash your hands.
5. When you cough or sneeze, cover your mouth and nose with a tissue or a bent elbow. Throw away used tissues right away, and routinely wash your hands.
6. If you experience symptoms or get a COVID-19 positive test result, isolate yourself until you get better.
7. Ensure that your mask covers your lips, chin, and nose.

Before putting on your mask, after taking it off, and every time you contact it, wash your hands.

Avoid enclosed, crowded, and close-contact environments, or the "3Cs."

Assemble others outdoors. Outdoor meetings are safer than indoor ones, especially if the inside space is small and doesn't have access to fresh air from the outside.

MYTH BUSTERS

1. Alcohol
2. alcohol-based hand cleaner
3. Quantity of alcohol-based sanitizer.
4. Religion, alcohol-based hand sanitizer.
5. Bleach
6. tidy hands
7. Snow and cold conditions
8. Dexamethasone
9. a hand dryer
10. soap and water
11. Hand sanitizers and necessary medications
12. Bottled hand sanitizer
13. humid and hot weather
14. spicy peppers
15. CO2 intoxication and masks
16. Alcohol and methanol
17. Mosquitoes
18. Younger folks and older people

19. Shoes
20. Sunny and warm conditions
21. Supplements
22. Swimming
23. Antibiotics, viruses, and bacteria

5 May 2023 –

The director-general of the UN World Health Organization (WHO) has stated that COVID-19 is no longer a public health emergency, but he has also emphasized that this does not mean the disease is no longer a threat to the world. He said that for more than a year, the pandemic "has been on a downward trend," with immunity rising as a result of infections and extremely powerful vaccinations created in record speed to combat the illness. Death rates have reduced, and the strain on health systems that were once overburdened has lessened. According to Tedros, "this trend has allowed most nations to resume life as we knew it before COVID-19."

How does covid-19 spread...?

This study intends to examine the influences of socioeconomic, demographic, and built environment factors on the distribution of COVID-19 cases at various scales. To that end, a thorough literature analysis is done to examine various facets of the topic. The search phrase consists of a combination of terms related to the subject: ("built environment" OR "city" OR "cities" OR "neighborhood" OR "county" OR "counties" OR "region" OR "local area" OR "district" OR "urban" OR "town") AND ("relationship*" OR "association*" OR "effect*" OR "impact*" OR "influence*" OR "connection*" OR "correlation*" OR " ("COVID-19" or "COVID" or "COVID" or "pandemic" or "epidemic" or "coronavirus" or "SARS-CoV-2") AND ("attribute*" or "characteristic*" or "dimension*" or "feature" or "factor" or "variable" or "conditions" or "settings" or "pattern" or "structure" or "arrangement")

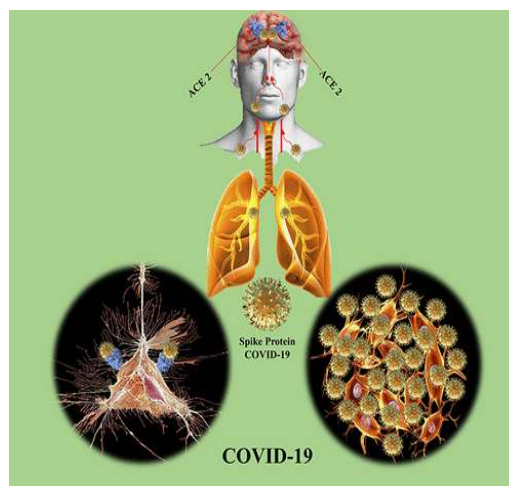


Fig 3 :Evidence of the COVID-19 Virus Targeting the CNS: Tissue Distribution, Host–Virus

Environmental factor

Droplets released by virus carriers and contacts are how COVID-19 is spread. The type of weather can also contribute to the transmission of disease. As a result, environmental factors might contribute to the explanation of COVID-19 transmission (Di Marco et al., 2020; National Commission of the PRC, 2020). This has been emphasized in a few previously conducted research. We infer that exogenous temperature, wind speed, and rainfall over the prior third and fourth weeks are responsible for new infection situations based on geographically disaggregated data over a longer period and the instrumental variable approach.

They demonstrate that a new infection causes an extra 1,465 cases in a week, with no clear impact on the next week.

Land use

One of the most important variables in controlling the dynamics of urban employment and population is urban land use. The distribution of the population in space, its mobility, and its congested areas are all impacted by the use of land for different purposes. The distribution of various land uses throughout the city may have an impact on COVID-19 transmission. The research makes use of a number of land use variables to illuminate how this dimension has impacted the dispersal of COVID-19 cases in metropolitan settings. Out of the 166 studies reviewed, 31 included land-use considerations in their analyses.

The transportation and morbidity

The transportation and population mobility components on the national, county, city, and urban district scales, according to our evaluation. In spite of the elements that are taken into account, it demonstrates that mobility and transportation variables are more prevalent on smaller sizes. COVID-19 initially appeared in China and was transmitted to other countries through international population mobility.

Therefore, one of the main factors used to analyze the mobility of the population is transportation infrastructure and its physical characteristics. Sigler et al. (2021) analyzed the effect of international airports on the spread of COVID-19 cases in 84 countries. The result of their analysis showed that more developed countries that have more globalization features and are more connected to other countries had a higher rate of infection in the first period.

Housing condition

The population's exposure to infected individuals has a significant impact on COVID-19 dissemination. Housing circumstances could have an impact on virus transmission for two basic reasons. First, quarantining affected individuals is a method of halting the spread of the virus, and homes require greater places for this.

Second, in order to stop the illness from spreading, governments enforced restrictions, forcing families to remain at their homes for a few days or weeks. Consequently, having enough room to work, relax, and spend time with family became essential. People who had to leave their modest homes often complained about the cramped conditions, which increased their risk of contracting an infection.

Demographic factor

The most often researched demographic factors in relation to COVID-19 distributed on various sizes include the overall population, the age structure of communities or vulnerable populations, urban or rural populations, and household size. 65 studies on the national, state, local, municipal, and urban district scales have taken into account these parameters in their analysis, according to our research. Older persons are more susceptible to contracting this virus because inhabitants' health is correlated with their age. In order to comprehend the dynamics of COVID-19 propagation, 49 publications use the community's age structure as a criterion. The literature is ambiguous on one topic, and that is the impact of population age. While

younger age groups are more susceptible to this virus, older age groups are more exposed to it than younger age groups, making younger people more likely to contract the disease. In the majority of the studies under consideration, there are more cases in the regions where the percentage of people 60, 65, or older is higher.

Socio-economic factor

Communities' socioeconomic features have an impact on the spread of COVID-19 cases both directly and indirectly. Socioeconomic condition of the population has an impact on how likely it is to contract the COVID-19 virus, according to epidemiological studies. Out of 166 papers that were reviewed, 77 different research used socio-economic factors. On the basis of the literature, several socioeconomic features of communities are examined, such as socioeconomic status (GDP and HDI), income and poverty, literacy and education levels, ethnicity, race, and religion, and unemployment rate. Due to the abundance of data on the county (26) and urban district (30) scales, these scales are used for the majority of these investigations. Income is one of the social standards.

Health-related factor

A contagious virus with a high rate of transmission was COVID-19.

However, the body's immune system and how it is supported were two crucial aspects of dealing with the infection. Thus, two primary health-related criteria were frequently cited in the literature.

The distribution of health infrastructure and services as well as the population's state of health. The percentage of people who suffer from ailments including chronic illness, diabetes, obesity, depression, and other mental and physical conditions is used to gauge the health of a community. Instead of focusing on morbidity, the majority of these research have examined how health problems affect mortality.

How to protect yourself and others....?

As soon as it's your turn, get vaccinated, and heed local immunization recommendations.

Keep your physical distance from people at least one meter, even if they don't seem to be ill. Avoid being in close quarters and crowds.

When physical separation is not possible and in places with poor ventilation, wear a mask that is correctly fitting.

Use soap and water or an alcohol-based hand massage to routinely wash your hands.

When you cough or sneeze, cover your mouth and nose with a tissue or a bent elbow. Throw away used tissues right away, and routinely wash your hands.

If you experience symptoms or get a COVID-19 positive test result, isolate yourself until you get better.

Wear up mask properly

To put on your mask correctly:

1. Ensure that your mask covers your lips, chin, and nose.
2. Before putting on your mask, after taking it off, and every time you contact it, wash your hands.
3. When you're done wearing your mask, store it in a fresh plastic bag, and every day, either wash your fabric mask if it's made of fabric, or throw your medical mask in the garbage if it's made of plastic.
4. Useless to wear valved masks.

Make your environment safer

To ensure the safety of your surroundings:

1. Avoid enclosed, crowded, and close-contact environments, or the "3Cs."
2. Assemble others outdoors. Outdoor meetings are safer than indoor ones, especially if the inside space is small and doesn't have access to fresh air from the outside.
3. Take these safety measures if you can't avoid crowded or enclosed environments:
4. To enhance the amount of natural airflow indoors, open a window.

Maintain good hygiene

By maintaining excellent respiratory hygiene, you can shield those around you from COVID-19, the flu, and other contagious viruses.

As a precaution, you should:

1. Regularly and thoroughly wash your hands with soap and water or an alcohol-based hand massage. This gets rid of any viruses and other microorganisms that might be on your hands.
2. When you cough or sneeze, cover your mouth and nose with your bent elbow or a tissue. Use a closed trash can to immediately dispose of the soiled tissue, then wash your hands.
3. Frequent surface cleaning and disinfection are especially important for frequently touched

areas like door handles, faucet handles, and phone screens.

How to respond if you're feeling seek What to do if you feel sick is outlined below.

1. Seek emergency medical assistance if you have a fever, cough, or difficulty breathing. Call by phone first, then adhere to the guidance of your regional health authority.
2. Understand the complete spectrum of COVID-19 symptoms. Frequent signs of COVID-19 include fever, a dry cough, exhaustion, and a loss of taste or smell. Aches and pains, headaches, sore throats, red or itchy eyes, diarrhoea, skin rashes, and discoloration of the fingers or toes are other less frequent symptoms.
3. Ten days from the start of symptoms, plus three days after they stop, should be spent at home and alone. For advice, contact a hotline or your doctor. Have supplies brought to you. Wear a mask that is well fitted if you must leave your home or have someone close by to prevent spreading the infection.
4. Follow the most recent news from reliable sources, such as the WHO or your local and national health authorities. The best persons to give advice on what residents of your area should be doing to protect themselves are local, state, and federal officials, together with public health units.

Since the first COVID-19 case was recorded in 2019, the entire world has been suffering from the pandemic's devastating impacts and working tirelessly to implement life-saving remedies that continue to lessen its impact.

The WHO Director-General formally proclaimed COVID-19 to be a public health emergency of international concern (PHEIC) on May 5, 2023. However, the COVID-19 pandemic continues to pose a threat to world health and needs to be managed sustainably and thoroughly.

II. CONCLUSION :

Since the first COVID-19 case was recorded in 2019, the entire world has been suffering from the pandemic's devastating impacts and working tirelessly to implement life-saving remedies that continue to lessen its impact. The WHO Director-General formally proclaimed COVID-19 to be a public health emergency of international concern (PHEIC) on May 5, 2023. However, the COVID-19 pandemic continues to

pose a threat to world health and needs to be managed sustainably and thoroughly but by creating a proper awareness and contributing knowledge to community will improve the public health as well.

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