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# COVID 19 TERMINOLOGY: KEY TERMS USED TO DESCRIBE NOVEL CORONAVIRUS DISEASE

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#### **ABSTRACT**

In December 2019 'a pneumonia of unknown cause' further identified as COVID 19 disease was first reported in Wuhan province of China that later emerged as a disease of century with high transmission rate. With millions of infected patients and thousands of death, the disease created such a panic that WHO declared it as a public health emergency. The disease has such a huge impact in everybody's life that it has dominated the news headlines, social media posts and alongside the many changes, an explosion of new words gained pace in everyday conversations. It has been observed that there has been a sudden flurry of new words entering into the lexicon. With billions of people talking about one issue, the information overflow lead to ambiguity and uncertainity. The rampant spread of misinformation about the virus has made things murkier. Current paper thus is an attempt to clear the clouds of confusion. All the terms commonly used to describe the COVID 19 disease are elucidated in this paper so as to

provide a comprehensive knowledge about it and decrease anxiety. Also the alphabetical arrangements of the words help in quick search.

**KEYWORDS:** COVID 19 disease; new words; comprehensive knowledge.

#### INTRODUCTION

COVID-19 is a severe acute respiratory disease caused by a new strain of coronavirus. It is a part of the subfamily Orthocoronavirinae which falls under the family Coronaviridae; order Nidovirales and realm Riboviria. [1-4] 'CO' stands for corona, 'VI' for virus, and 'D' for disease. [5] Symptoms can include fever, sore throat, cough and shortness of breath which are often similar to those of any other respiratory virus infections, such as influenza. In more severe cases, infection can cause pneumonia or breathing difficulties. [6,7] People with low immunity such as the elderly, pregnant women and patients with chronic diseases (High Blood Pressure, Heart Disease, Lung Disease or Diabetes) are prone to severe acute symptoms after contacting novel coronavirus. The virus is transmitted through direct contact with respiratory droplets of an infected person (generated through coughing and sneezing). Individuals can also be infected from and touching surfaces contaminated with the virus and touching their face (e.g., eyes, nose, mouth). [8-11]

The outbreak of coronavirus disease (COVID-19) has been declared a Public Health Emergency of International Concern (PHEIC)<sup>[12-14]</sup> as the virus has spread rapidly to many countries and territories with 26 million confirmed cases and 8,63000 fatalites till August 2020. World over, the COVID 19 disease has resulted in the creation of a slew of new terms like pandemic, quarantine, self- isolation, symptomatic, convalescent plasma, containment area, index case etc. and many more new terms are still emerging every day. These terms nowadays have become a part of our daily conversation while discussing about this disease. Sometimes a lack of clarity about this newly introduced terminology creates a lot of confusion and misunderstanding. Present paper is an attempt to explain the newly coined terms related to COVID 19 disease. A brief description about those terms will be helpful in updating the knowledge regarding the disease and further fruitful in updating ones vocabulary.

#### **METHADOLOGY**

A number of research journals, health magazines and newspapers were searched so as to prepare a list of all those terms that were used to describe COVID 19 disease. Oxford dictionary and medical dictionaries were referred to elucidate those terms which was further authenticated by the medical experts of different fields so as to get a comprehensive knowledge about the subject.

#### RESULT AND DISCUSSION

#### A

- **Antibody:** Also called immunoglobulin, a protective protein produced by the immune system known as plasma cells in response to the presence of a foreign substance, called an antigen. Antibodies are created in response to a new infection and are specific to unique regions on a virus or bacteria.
- Antigen: A substance that causes the body immune system (the system for fighting infections) to react, especially by producing antibodies (proteins that attack harmful bacteria, viruses etc.)
- **Asymptomatic:** Presenting no symptoms of a disease. An asymptomatic person is that who does not show any visible signs or symptoms of having a disease despite being infected. In case of COVID 19, this means absence of fever, dry cough, sore throat, shortness of breath and body aches, among other less common symptoms. This is a major challenge with the coronavirus as these individuals unknowingly can infect others.
- **Antibody Test:** This test, also called serology test, used to identify people who may have been infected with the SARC-CoV-2 virus or have recovered from the COVID-19 infection. Blood samples of a person are used to check the presence of antibodies of SARC-CoV-2, the virus that causes COVID-19 disease.

#### $\mathbf{C}$

- Case fatality rate: The ratio of deaths from COVID-19 to the total number of individuals diagnosed with the disease.
- Centre for Disease Control (CDC): A department in the United States government. They protect people from getting sick. The CDC is a leader in the fight against the Coronavirus.
- Chronic Obstructive Pulmonary Disease (COPD): An illness in the lungs that makes breathing hard. It gets worse over time. There are evidences that COPD may be a risk factor for more severe COVID 19 disease.
- Clinical trial: Research experiments on human participants designed to answer questions about new treatments; in the case of COVID-19 and coronaviruses, the safety and efficacy of a potential vaccine.
- **Cluster:** A collection of cases occurring in the same place at the same time. In case of COVID 19 early clusters developed in California, New York and Washington state in the US during February and March 2020.

- Community spread: Circulation of a disease among people in a certain area with no clear explanation of how they were infected—they did not travel to an affected area and had no close link to another confirmed case. This is sometimes referred to as community transmission. According to a report the spike in the number of COVID 19 cases in India (especially the spread in the rural areas) has resulted in the community spread of the coronavirus disease according to Indian Medical Association (IMA).
- **Comorbidity:** The presence of one or more diseases, along with another condition at the same time in an individual. The conditions which can generally overlap with COVID-19 disease are diabetes, hypertension, cardiovascular illness, other body infections, and mental disorders, etc. Patients with underlying medical conditions are said to be at the most risk of developing severe symptoms of COVID-19.
- Contact tracing: Identifying and monitoring people who may have come into contact with an infectious person. In the case of COVID-19 it is an important effort to control the spread of disease.
- **Contagious:** A disease that can pass from person to person, usually by direct contact, describing a person with such a disease. COVID 19 is considered as the most contagious disease.
- Containment area: A geographical zone with limited access in or out in an effort to contain an outbreak. According to Health Ministry, in case of COVID 19 disease, it refers to a specific area where the cases of coronavirus are found. Strict movement restrictions are maintained in such areas to prevent further spread of the virus.
- Convalescent plasma (CP): Blood plasma donated by persons recovered from COVID-19 (containing natural antibodies).
- **Convalescent plasma therapy:** A therapy authorized by the U.S. Food and Drug Administration (FDA) where the antibody-rich plasma called convalescent plasma collected form the recovered COVID-19 patients (CCP) is transfused to the severely or critically ill COVID-19 patients.
- **Coronavirus:** A group of RNA viruses that cause diseases in mammals and birds. The name "coronavirus" derived from Latin corona meaning "crown" or "wreath". They are the members of the subfamily Orthocoronavirinae, in the family Coronaviridae, order Nidovirales and realm Riboviria. In humans and birds, they cause respiratory tract infections that can range from mild to lethal.

- **COVID 19:** A mild to severe respiratory illness that is caused by a new strain of coronavirus. The name comes from CO-rona-VI-rus-D-disease along with the year it was discovered (2019). The number of COVID 19 positive cases has crossed a million mark making India the third country after United States and Brazil to reach this grim milestone.
- Cytokine storm: It is a hyperactive immune response to an external stimuli. Normally cytokines, a protein, is released into the blood to regulate the immune response against any infection. Experts noticed that in several critically ill patients with COVID 19 infection there is a violent cytokine storm which dilates their blood vessels, increase the temperature and heartbeat, besides throwing blood clots in the system and suppressing oxygen utilization that ultimately leads to multi-organ failure and death.

 $\mathbf{D}$ 

**Droplet transmission:** When bacteria or viruses travel within small drops of liquid from the respiratory tract. These droplets produced by coughing, sneezing, singing, or talking (of a coronavirus patient) and can be inhaled by or land on the mouth, nose, or eyes of a person nearby leading to a spread of the infection. In case of COVID 19 disease the droplet transmission can be reduced by using personal protective equipment, including face masks, face shields, or goggles.

 $\mathbf{E}$ 

**Epidemic:** A sudden increase in the number of cases of a disease that spreads quickly and affects many individuals at the same time in a particular area.

F

- **Face mask:** A piece of fibre or cloth fits over the nose and mouth to protect other people from the wearer's germs and or the wearer from germs in the air. During COVID 19 disease use of face mask is recommended by WHO as a protective measure.
- **Flattening the curve:** The curve refers to the number of people infected by the virus over a period of time. If the infection rate is very high, the curve tends to be steep, endangering the country's healthcare system. Flattening the curve means, even if the number of cases is eventually the same, it will happen over a very long period of time, ensuring fewer cases on any given day.

The exponential rise in the number of positive cases of COVID 19 has exerted immense pressure on the health care system of several countries. Flattening the curve means slowing down the rate of increase of positive cases so that fewer people seek medical attention at any given time. It is the best possible option to treat the affected people efficiently and can be achieved through physical distancing and self- isolation.

**Fomite:** An inanimate object (bedding, towels or surgical instruments) which can become contaminated with the COVID-19 virus and facilitate the transmission of it to new host.

#### Η

- **Hand hygiene:** Washing hands with soap and water for at least 20 seconds. It is the key strategy to protect against COVID 19.
- **Herd immunity:** It is also known as 'community immunity'. It is a phenomenon where a large part of an area or a community of people become immune to an infectious disease, which effectively stops the disease from spreading and protects the entire community. It can be achieved in two ways; firstly, many people contact the disease, and over time, build up a natural immune response to it and secondly, many people are vaccinated against the disease, thereby achieving immunity.
- **Hydroxychloroquine:** An oral medicine commonly prescribed in the treatment of malaria, rheumatoid arthritis, chronic discoid lupus erythematosus and systemic lupus erythematosus. Hydroxychloroquine was originally included in the solidarity trial to find an effective COVID 19 treatment but this arm was stopped, as of 17 June 2020, as evidence showed it did not result in the reduction of mortality of hospitalized COVID 19 patients, when compared with standard of care.

### I

- **Incubation period:** The time between when an individual is first exposed to the virus and the appearance of symptoms. The incubation period for COVID 19 ranges from 2-14 days after exposure to the virus, although this period may vary from person to person.
- **Index case:** The first documented case of an infectious disease. The index case of COVID 19 disease was reported from China.
- Index patient: The first person infected with a disease in an epidemic. Interchangeable with the term "patient zero". The first confirmed case of the COVID 19 disease (patient zero) was traced back to a 55 year old patient in Hubei province and was reported in a Chinese newspaper on 11 November 2019.
- **Isolation:** Separating sick people with a contagious disease from those who are not sick.

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#### $\mathbf{L}$

• **Lockdown:** An emergency measure in which individuals are restricted from certain areas in an attempt to control exposure or transmission of disease.

In India, a nationwide lockdown limiting the movement of entire 1.3billion population was imposed as a preventive measure against COVID 19 on 25<sup>th</sup> March 2020 which was further extended till 31 May 2020 in different phases (68 days). During that period the people were encouraged to stay at home. All educational institutions, hospitality services, industrial establishments, transport services – road, air, and rail – were suspended, with exceptions from transportation of essential goods, fire, police, banks and ATM, petrol pumps, and other emergency services. Government of India issued various guidelines, from time to time, for the general public during the lockdown.

#### $\mathbf{M}$

- Morbidity: The proportion of illness or a specific disease in a geographical locality.
- Mortality: Mortality is another word for death. The mortality rate measures the number of deaths in a certain group of population during a specified time period. It is often measured per 1,000 or 100,000 people. Ministry of Health & Family Welfare reports that India's COVID 19 mortality rate stands at 1.58% (till August 2020) which is one of the lowest in the world.

#### $\mathbf{N}$

National emergency: A situation in which a government is empowered to be able to put
through policies that it would normally not be permitted to do, for the safety and
protection of their citizens. A government can declare such a state during a natural
disaster, civil unrest, armed conflict, medical pandemic or epidemic or other biosecurity
risk.

States of emergency can also be used as a rationale or pretext for suspending rights and freedoms guaranteed under a country's constitution or basic law. The procedure for and legality of doing so vary by country.

• **Novel coronavirus:** A new strain of coronavirus, or n CoV, that has never been detected in humans.

• **N 95 Respirator:** Sometimes casually referred to as an "N95 mask". Though it looks like a surgical mask, an N 95 is actually a respirator that filters out at least 95% of particles in the air. It is worn on provider's faces, forming a tight seal around the nose and mouth.

0

• Outbreak: A sudden increase in the number of cases of a disease that spreads quickly and affects many individuals at the same time in a limited geographic area.

P

- Pandemic: An infectious disease that spread over a large area, becoming prevalent throughout an entire country, continent or the whole world, impacting many people.
   COVID 19 was declared a pandemic by the WHO in early March 2020.
- PCR test: A test that detects viral particles in blood or other body fluids. PCR
  (polymerase chain reaction) test is one of the tools that doctors use to diagnose certain
  coronavirus diseases.
- Personal protective equipment (PPE): Specialized clothing or equipment used as a safeguard against health hazards including exposure to infectious diseasses through physical contact or airborne particles. PPE is designed to protect parts of the body typically exposed in normal attire, including the nose, mouth, eyes, hands and feet. It includes gloves, gowns, aprons, masks, respirators, goggles and face shields. Healthcare workers (doctors, nurses, medical lab technicians etc.) were recommended to use PPE while caring for COVID 19 patients.
- **Physical distancing:** The practice of maintaining greater space between oneself and others/ or avoiding direct contact with other people. The practice of staying at least 6 feet away from other is recommended to prevent the spread of coronavirus.
- **Positivity rate:** The percentage of people who test positive for COVID 19 among all those who are tested. A high positivity rate may indicate that only high risk groups are being tested whereas a low positivity rate depicts that not enough testing is being done.

Q

• Quarantine: The restraint upon the activities or communication of person or transport person who of goods designed to prevent the possible spread of an infectious disease. It is used as an important preventive measure to check the spread of coronavirus.

R

- Remedesivir: An antiviral medication that is administered intravenously and inhibits viral replication. It is used for the treatment of COVID 19 disease.
- **RO:** RO (Reproductive number) refers the average number of people that a sick person goes on to infect, among a group that has no immunity to the virus. Experts use it to predict how far and how fast a disease will spread. According to WHO the RO of the new coronavirus is approx. 2-2.5.
- RT-PCR (Reverse Transcription-Polymerase Chain Reaction): It is the primary test with better sensitivity (correct identification of the disease) and specificity (correct identification of those without the disease) to detect COVID 19 infection. In RT-PCR test; samples from the nasal/oral cavity are used to diagnose the presence of viral RNA (ribonucleic acid).

S

- **SARS-CoV-2:** The name of the novel coronavirus that causes COVID-19 disease.
- **Self isolation/ Self quarantine:** A voluntary act of separating oneself from any contact with other individuals for a period of time so as to prevent the spread of a disease. In case of COVID 19 a period of two weeks is recommended to observe whether any symptoms of the disease will arise after potential exposure.
- **Self monitoring:** Checking yourself for COVID 19 symptoms, such as fever, cough or difficulty breathing. If one notices symptoms, one should self-isolate and seek medical advice.
- **Social distancing:** The act of remaining physically apart so as to prevent the spread of a contagious disease. This is the key strategy for avoiding the COVID 19 infection and the measures includes closing schools and offices, cancelling mass gatherings and encouraging people to stay at least 6 feet apart in public places.
- Super spreader: A highly contagious individual who can spread an infectious disease to a large number of uninfected people through a network of contacts. In case of COVID 19 they play a large role in the transmission of virus.
- Symptomatic: Someone who has the common symptoms associated with a disease or condition. In case of COVID 19 a symptomatic person displays visible symptoms which includes a fever, dry cough, shortness of breath and body aches. Health officials believe the rise of transmitting the virus is highest when an individual is symptomatic.

#### $\mathbf{V}$

**Ventilator:** A machine to help patients breathe when their lungs are damaged, and they can't get enough oxygen on their own. A ventilator takes over the work of breathing for a patient to allow the damaged lungs to heal, it is not itself a treatment. As there are no FDA- approved treatment yet for the COVID 19, seriously ill patients are given supportive care, including supplementary oxygen and mechanical ventilator support.

#### $\mathbf{Z}$

Zoonotic disease: A disease that can be transmitted from animals to humans. The initial inferences from the Wuhan Seafood market hypothesized animal source attachments and wild animals for the spillover of COVID 19 disease.

#### **CONCLUSION**

Since December 2019 there has been a lot of noise about COVID 19 disease. The whole community and the society across the world are facing the challenge to figure out the impact of the coronavirus resulting an introduction of new words such as pandemic, social distancing, quarantine, asymptomatic, herd community etc. during day to day conversations. An overflow of such new terms creates a lot of confusion and misunderstanding which ultimately leads to a panic among people. All the terms regarding COVID 19 are well explained in the present paper and henceforth will serve as a reference material in updating ones knowledge regarding COVID 19 disease.

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