New Coronavirus: Death warrant in China.

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ABSTRACT

Human coronavirus are type of viruses commonly affect upper respiratory tract of mammal's (humans) and birds. Common symptoms include, common cold or flu like symptoms. Symptoms depends upon person to person-toperson and their immune status, ranging from no symptoms to severe illness. The clinical symptom includes sneezing, coughing, running nose, sometime mild to high fever, sore throat, asthma, breathlessness and fatigue. Recently authorities have identified a new coronavirus outbreak in Wuhan, China. This article summarises different types of coronaviruses and its spread all over the globe. This article may not be complete, because every day the number of cases affected and death are changing and found in an increasing order.

Keywords: Human coronavirus, Immune status, Sympotms, Death warrant.

INTRODUCTION

Classification

Phylum:	Incertae Sedis			
Order:	Nidovirales			
Family:	Coronaviridae			
Sabfamily:	Orthocoronavirinae			
Genius:	Alphacoronavirus, Betacoronavirus,			
SARS (Severe acute respiratory syndrome),				
MERS (Middle East respiratory syndrome).				
Type species: Alphacoronavirus 1, Murine Coronavirus.				
Coronavirus	belongs from family Coronaviridae, order			
Nirovirales, they are enveloped non-segmented positive				

sense RNA viruses, they are broadly distributed in human and other mammals [1]. Most human coronavirus infections are mild, the outbreak of this virus was firstly manifested by pneumonia in Wuhan, the capital of Hubei province in Mainland China with clinical presentation resembling viral pneumonia [2]. Human coronavirus (HCoV) were firstly identified in 1960 from a patient suffering from common cold. This virus is named Corona because structurally it looks like Crown-like projection on the surface. The word Corona come from Latin language, i.e. Coro means "hallo" or "crown". In human being, generally these viruses set infection either early in Spring or during winter season. After onset of infection, body produces antibody, but they did not last for longer time, depending upon the strains the antibody is produced. Antibody for one strain of coronavirus may be useless against other strain of virus.

Symptoms

After entry of virus into the host patient feels cold or flu like symptoms, initially the symptom is mild and takes 2 to 4 days or maybe up to two weeks. symptoms also depends upon person to person and their immune status, ranging from no symptoms to severe illness and may be fatal. The clinical symptom includes sneezing, coughing, running nose, sometime mild to high fever, sore throat, asthma, breathlessness and fatigue. Unlike other viruses, this human coronavirus is very difficult to cultivate in cell line or laboratory, therefore it is difficult to gauge the coronavirus impact on public health and economies.

As there is no concrete treatment to cure or kill this virus, so treatment include only taking care of yourself. Some suggest preventive measure are there which includes rest, avoid overexertion, drink ample of water, avoid smoking or breathing in smoking areas or you can take Acetaminophen, Naproxen or Ibuprofen to reduce the pain and fever.

This virus can be diagnosed by taking liquid or fluid sample from upper respiratory tract, for example mucus from nose or even you can take blood.

Types of virus

There are several types of human coronavirus have been identified based on the severity of illness they cause and how far they can spread. Common types include Alphacoronavirus (229E, NL63), Betacoronavirus (OC43, HKU1), MERS-CoV (Middle east respiratory syndrome coronavirus) and SARS-CoV (Severe acute respiratory syndrome coronavirus). The MERS-CoV is responsible for MERS, while SARS-CoV is responsible for SARS. The outbreak in China during January 2020 was by new and dangerous strain of coronavirus and is officially not named till 11 February 2020, but health authorities (PCNV- Provisional commission on nomenclature of virus) are referring it as 2019 novel coronavirus (2019-nCov). The authentic name to this virus have been given by WHO (World Heath Organization) on 12th February 2020 as Covid-19. Where Co is abbreviated for Corona, vi, for virus and d, for disease. The first case of Covid-19 was detected from China on 31st December 2019 [3] using metagenomics sequencing, WHO [4]. This virus is transmitted from one person to another by droplet nuclei secreted from nasal fluid of respiratory system. The major ways of spread of this virus includes, sneezing, and coughing by the career or patient without using the mask. the droplet nuclei disperse into the air and disseminate the virus. This virus can pass from one person to another person by touching or shaking hands with each other, having contact with the surface or inanimate objects, that has virus and then touching mouth nose or eyes.

Rarely this virus can transmit with feces and faecal matter, but it is stated that the mutant strain of this virus are very dangerous for transmission. To avoid the transmission and exposure, the best way is to stay at home and rest during symptomatic phase, and avoid direct contact with healthy person. You can avoid its transmission by covering your mouth and nose using mask, handkerchief can also be used during sneezing or coughing, which helps to prevent the further spread and transmission of virus in air. The hygiene can be maintained by proper disposal of used handkerchief or tissue papers used as a preventive measure.

Sr.	Date	Number of cases	
No.		Death	Affected
1	13 February 2020	1355	22105
2	16 February 2020	1890	38314
3	19 February 2020	2000	74060
4	21 February 2020	2236	75465
5	23 February 2020	2442	77000
6	26 February 2020	2804	82166

Table 1: Number of death and affected cases by new coronavirus viz. 2019-nCov (Covid-19).

Novel coronavirus 2019 (2019-nCov)

Centre for Disease Control and prevention (CDC) monitor the outbreak of this new coronavirus during December 2019, and identify this presence of virus in Wuhan, China, hence the authorities have name the virus 2019 novel coronavirus and abbreviated as 2019nCov. The 2019-nCoV infection caused cluster of severe respiratory illness similar to SARS coronavirus and was associated with ICU admission with high mortality [5] Presently more than 82,000 population of China have affected by the infection caused by novel coronavirus (Covid-19) with more than 2800 deaths till 26 February 2020. Everyday this figure of affected cases and death are changing due to continuous spread of this disease. Date wise death and affected cases are summarise in table 1. The authorities of health department have clearly identified that the people are infected with new coronavirus viz. 2019-nCov, though the outbreak is initiated from China, but due to migration of people from China to other countries also helps to disseminate this virus. Presently more than 30 countries have detected the cases of new coronavirus, currently more than five people have affected in US. At the end of January 2020 the transmission of virus from one person to another has been reported in US. More than three cases have been declared from India, two people have been died from Hong Kong and Philippines respectively. The number of cases have been detected from various countries like Singapore 24, Japan 20, Thailand 19, Hong Kong 17, South Korea 16, Australia 12, Malaysia 10, Taiwan 19, Vietnam 10, Macau 9, India 3, Philippines 2, Nepal 1, Sri Lanka 1, Cambodia 1, USA

11, Britain 2, Canada 4, Germany 12, Italy 2, Russia 2, Finland 1, Spain 1, Belgium 1, Sweden 1, Pakistan 1, and Saudi Arabia 5 [6].

For further prevention of spread of disease, Government of China seek for court approval to kill more than 20,000 patients suffering from infection caused by new coronavirus. The Government argues that, the patient suffering from coronavirus infection admitted at hospital only have their death delayed and affect many other while receiving care at the hospital, hence WHO (World Health Organisation) have declared a "public health emergency" on 5th February 2020. Covid-19 can spread from one person to another person through respiratory droplets, when someone with the viral cough or sneezes and when your breath it in. mostly transmission can occur when healthy person come around six feet close to affected person.

Initially it was thought that this virus was spread from animal and seafood to human being, but because of advanced techniques in diagnosis, authorities come to conclusion that, there is no connection of this virus with animal and seafood market or its consumption. This very clear suggest that, only humans are responsible to pass and transmit this new coronavirus to each other's. Presently the detailed information about this virus is not available, but in past SARS (Severe acute respiratory syndrome) and MERS (Middle east respiratory syndrome) these syndromes or conditions were developed due to the infection caused by coronavirus, and this disease where spread among human being because of close contact with each other's. Some viruses are potently contagious and spread very rapidly, but it is not clear that, with coronavirus as how rapidly they will spread. Currently there is no vaccine available to cure this infection, but scientist have succeeded to replicate or cultivate this virus in laboratory which helps for early detection and proper treatment.

WHO have developed interim guidance for laboratory diagnosis, advice on use of masks during home care and in health care setting in context of Covid-19 outbreak, clinical management, prevention of infection and its control, home care for patient with suspected Covid-19.

Conflicts of interest: The authors stated that no conflicts of interest.

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