



Editorial

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An Overview of Transmissibility and Severity of COVID-19

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Abstract

COVID-19 is an emerging viral disease affected globally all 205 countries including the Diamond princess cruise ship harboured in Yokohama, Japan. Transmissibility of Novel coronaviruses SARS-CoV-2 is higher than the SARS-CoV-1, whereas case fatality is larger in SARS-CoV-1. The first case of SARS-CoV-2 identified near the seafood market of Wuhan city of Hubei province. On 31st January 2020 USA declared coronavirus a public emergency. SARS-CoV-2 remains viable in aerosols more than three 3 hours and fomites for days without reduction of infectivity. Globally 1,118,844 Coronavirus cases identified (4th April 2020) with high mortality 59,236 among all cases that is 5.29%.

Keywords: SARS-CoV-1, SARS-CoV-2, COVID-19.

INTRODUCTION

Most of the emerging viral diseases have posed a potential threat to the civilization in recent past. In the last two decades, several viral epidemics such as Ebola virus disease, Avian influenza A (H7N9), Middle East Respiratory Syndrome coronavirus (MERS-CoV), Severe acute respiratory syndrome coronavirus (SARS-CoV), pandemic (H1N1) 2009, influenza at the Human-Animal interface (HAI) have been recorded. In the present situation we are facing a lower respiratory viral infectious disease, a pandemic poorly explained. The first case was reported to the World Health Organization (WHO) from Hubei province of Wuhan city. Huanan seafood market of Wuhan metropolitan area of China is considered to be the origin of this newly emerging lower respiratory infection causing viruses. WHO country office in China notified it first as unexplained pneumonia of unknown aetiology on 31st December 2019.

The aetiology of lower respiratory disease erstwhile called as Novel corona virus pneumonia (NCP) by Chinese Government. International committee of Taxonomy of virus renamed the virus SARS-CoV-2. Later on the 11th February 2020 WHO suggested that the disease is caused by CoV later renamed as " COVID-19", which is synonyms to " Coronavirus disease -2019".

DISCUSSION

The coronavirus COVID-19 has already affected all the 195 countries throughout the globe with territories around the world and The Diamond Princess cruise ship harboured in Yokohama, Japan. Death rates have been larger in higher age groups and mortality rate has been proven higher in men than in female (4.7% and 2.8%) [1,2]. Death rates have also been shockingly higher in pre-existing comorbidity such as cardiovascular disease, Diabetes, Hypertension, Chronic respiratory disease, Cancer [1,2].

First Human to human transmission of SARS-CoV-2 was identified by a clinician and scientist of the Hong Kong university [3]. Secondary attack rate among families have been 83% and clinical symptoms vary from mild to moderate other than that in old people[4]. Generally fatality rate has been higher in SARS (Severe acute respiratory Syndrome) patients at 14% to 15% [5] in comparison to COVID-19 approximately 4% till date. Transmissibility of SARS-CoV-2 is higher than SARS-CoV, SARS-CoV-2 remains viable in aerosols for 3 hours and fomites for days without reduction of infectivity[6]. 1,118,844 global coronavirus cases have been identified till 4th April, 2020 and number of deaths classified as 59,236 that is 5.29 % of the total affected population. In India, a total of 3082 cases have been identified among which 86 deaths recorded (2.79%). In India rising of case detection rate with case fatality rate which may alarming a grievous situation ahead [Table- 1].

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Table 1: Case detection rate with case fatality rate in India

Serial No	Date	Total No of Detectable Cases	Total No of New Case	Total No of Death	Declared as recovered	Remarks Death %
1	15 th Feb	3	3	0	0	
2	23 rd Feb	3	0	0	0	
3.	2 nd Mar	7	4	0	0	
4.	10 th Mar	62	55	0	0	
5.	18 th Mar	169	114	3	6	1.77%
6.	26 th Mar	727	613	20	67	2.75%
7.	4 th April	3082	2355	86	56	2.79%

CONCLUSION

SARS-CoV-2 having higher human to human transmissibility either through aerosol or fomite. Activity of virus may persist in the favourable condition from several hours to days in the environment, without decreasing infectivity. So social distancing, wearing a mask preferable three-layer surgical mask or N95 mask, washing hands, avoid touching mouth, face, nose, eyes and any environmental objects un-necessary may give a protection from infection.

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