

Mini Review





# A brief overview of elusive character of Covid-19

#### **Abstract**

Covid-19 has terribly shaken the whole world. The disease has spared none. Since its inception, it is observed that the virus emerges as new strains whose characteristics remain untraceable for a considerable period. These new strains are capable of baffling the health care professionals. Even the symptoms are also found to bamboozle the infected ones which defer the rapid detection of the disease. Keeping all these in mind, this communication briefly overviews the elusive character of Covid-19. As precise and definitive evidence of the evolution of this virus to mutants is still in the primitive stage, it is believed that sticking to Covid appropriate behavior can be an effective solution to mitigate the hazard posed by this virus

Volume 10 Issue 1 - 2022

#### Rajib Biswas

Department of Physics, Tezpur University, India

**Correspondence:** Rajib Biswas, Applied Optics and Photonics Lab, Department of Physics, Tezpur University, Tezpur-784028, India, Email rajib@tezu.ernet.in

Received: May 14, 2022 | Published: June 08, 2022

Keywords: Covid-19, strain, symptoms, virus

#### Introduction

Covid -19 is the most inscrutable and eccentric novel corona virus experienced by humanity so far. Even as China marks the 2nd Anniversary of this dreaded virus, scientists are yet to fully unravel the mystery of this lethal virus and establish the pattern in which it behaves. For instance, it had a greater adverse impact on developed countries as far as fatalities proportionate to population are concerned. The nations with large as well as small population's size seem to be equally suffering from this contagion. These alarming facts are still puzzling the scientists as there is recurrence of Covid-19 with new variants. Sudden and unexpected recurrence of virus clusters underlies the reality that no place can consider itself having totally eradicated Covid-19. As for example, we can cite the example of China. 1-5 This nation which boasts of -zero tolerance in Covid-19 situation is now undergoing a tough phase as many of its prominent industrial hubs are under lock-down. To add more woes, the disease impresses its survivors with new mutations leading to the emergence of varying variants as well as their sub variants. This article overviews the scenario posed by Covid-19 emphasizing the elusive characteristics of it.

## **Background**

The covid-19 pandemic has magnified every existing inequality in our society. Being an intrinsic property, the SARS-Cov-2 has shown mutations from time to time, starting from Alpha, Beta, gamma, Delta to the latest Omicron variant. Not all of these variants are fatal except a few of them. In Nov 21, a Covid-19 variant was named Omicron after the Greek alphabet. The Greek alphabet nomenclature as adopted by WHO facilitate easy communication as well as identification as compared to scientific names such as B.1.617.2

The surge in the Covid-19 cases worldwide has indicated the beginning of the third wave. People are now questioning the efficacies of vaccine administered in this new variant. Omicron, which is believed to be more transmissible than its counterpart. It is likely to infect a larger mass within a less span of time. As per reports, the omicron attacks in a milder way as compared to delta. Still the researchers are working hard to find the ways of its transmission. The severity of illness it causes as well as efficacies of vaccines and medications against it.<sup>5-9</sup>

The Delta variant was first discovered in October 2020 in India particularly. This has led to the devastating second wave which resulted in loss of thousands of lives. Omicron surfaced in the month of November 21 which was first detected in South Africa. As far as

the symptoms of these two variants are taken into account, fatigue, cold and headaches, joint pain are prescribed as the emerging ones. Whereas loss of smell as well as taste along with short breath-ness are the common symptoms of Delta Variant. However, these cases are absent in patients infected with Omicron. Although young adults report low-grade fever. All these clamors for more data to find out about the severity caused by Omicron variant as compared to others. It also necessitates statistics related top reinfections; breakthrough infections caused by Omicron itself.

# **Elusive facts**

As far as diagnosis of Covid-19 is concerned, RT-PCR remains the gold standard. The determination of a variant can be done by the sequencing test. There are specific mutations test that can detect whether the strain is beta, delta or omicron. These tests are being conducted at the clinics. Although the variant determination remains as a research progress indicator, however, the treatment remains the same for most of them. Coming to the treatment side, there is as such no specified protocol for treating omicron. Based on the varying genetic make-up of Omicron, some treatment appears to be less effective while some of them appear functional. Current vaccines are expected to protect against severe illness, hospitalizations, and deaths due to infection with the omicron variant. However, breakthrough infections in people with full vaccination status are probable and there are considerable cases of Omicron infecting doubly vaccinated ones.<sup>9-14</sup>

With no conclusive scientific knowledge vis-à-vis the corona virus, its spread, and its treatment still are eluding mankind. The best thing one can do is to remain alert. Here lies the criticality of the basic precautions such as universal mask wearing, social distancing and hand sensitization. The lack of conclusive scientific evidence on the various aspects of the contagion is borne out by the frequent changes being affected in the treatment regime all over the world. Likewise, the changing theories on the movement and the behavior of this dreaded virus are of concern. As for instance, one can cite about the plasma therapy during the initial changes of the breakout of covid-19. Itwas the most sought-after mode of cure. It is no longer used as researchers found it to be extraneous. Similarly, use of steroid has now gained ground after the initial dismissal of this mode of treatment. The reality check is that Covid-19 being a completely new disease; it is natural that the response to the contagion will also keep evolving. <sup>12-14</sup>

# **Concluding remarks**

To summarize, it can be said that human race is battling an unknown/half known virus species which keeps on changing its





13

traits with persistent mutations. With the latest development in drug technology as well as pharmaceuticals industries, it is expected that there may be a plausible one step solution to combat this pandemic. However, there is lot of uncertainties given the elusive characteristics of this novel corona virus. Be that as it may, the definite interventions that we need now the urgent need to have more hospital beds, covidcare centers, an interrupted supply of medical oxygen, and last but not the least, speeding up the vaccination drive. This indicates that each nation should ensure that it must not let down the guard down no matter how positive the indicators might be. As precise and definitive evidence of the evolution of this virus to mutants is still in the primitive stage, it is believed that sticking to Covid appropriate behavior can be an effective solution to mitigate the hazard posed by this virus.

# **Acknowledgments**

None

#### Conflicts of interest

The author declares no conflicts of interest.

### References

- 1. Notes & Details on the 2019 Novel Coronavirus Testing (COVID-19).
- 2. Reuters Staff. HHS Supports Development of First High-Throughput COVID-19 Diagnostic Test. 2020.
- 3. B Zehnbauer. Diagnostics in the Time of Coronavirus Disease 2019 (COVID-19): Challenges and Opportunities 2021. J Mol Diagn. 2021;23(1):1-2.

- 4. Interim Guidelines for Collecting and Handling of Clinical Specimens for COVID-19 Testing. CDC. 2022.
- Y K Gurav. Specimen Collection, Packaging and Transport Guidelines for 2019 novel Coronavirus (2019-nCoV).
- 6 RBiswas. Are Men More Vulnerable to Covid-19 as Compared to Women? Biomed JSci& Tech Res. 2020;27(2):20645-20646.
- 7. R Biswas. Nanosponges: a viable option for combating Covid-19. J Clinical Researchand Reports. 2020;5(4).
- 8. R Biswas. Wearable bio-sensors: a gigantic leap in health care system. Int J Biosen Bioelectron. 2020;6(4):103-104.
- 9. R. Biswas. Covid-19 and race for rapid diagnosis. J Bacteriol Mycol Open Access. 2021;9(2):54-55.
- 10. R. Biswas. BIG Data Analytics: A boon for SMART Healthcare. International Journal on Engineering Technologies and Informatics. 2021;2(1):15-16.
- 11. Rajib Biswas. Catheter like in vivo fiber optic probe for rapid diagnosis of SARS-CoV-2. Results in Optics. 2021;5.
- 12. R Biswas. Variants of SARS-Cov-2: a cause of concern. J Bacteriol Mycol Open Access. 2021;9(4):150-151.
- 13. R Biswas. Outlining Big Data Analytics in Health Sector with Special Reference to Covid-19. Wirel Pers Commun. 2021;124(3):2097-2108
- 14. Rajib Biswas. Covid-19 and its Impact on Eye. Tr Ophtha Open Acc J. 2022;3(4).