

## COVID-19 to Omicron: The next variant of concern?

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### **Abstract**

In The individuals across nation are finding ways to avoid going out of home because the COVID-19 virus has caused a shamble, and this particular situation has resultant in enhancing both potential value and challenges with the healthcare system. The L strain was the first COVID-19 strain ever found, and it was detected in December 2019, in Wuhan, China. Since the virus quickly evolved into different strains from the beginning of 2020—and it was before any of us were concerned about COVID-19 variants—no one really recalls it. China and a few other Asian nations at the time that had witnessed the SARS pandemic in 2003 were on full edge. In January 2020, the Chinese government put numerous cities on lockdown, although the coronavirus was still encroaching in the United States at that time. The 'World Health Organization' opted to designate each and every notable variant by using Greek alphabet, commencing with Alpha, as COVID-19 started undergoing further devastating mutations. This research work will critically appraise the interphase recent Covid-19 variant omicron with older one and its legal implication.

### 1. Introduction:

When Coronavirus arose, the entire world suffered including India. India was adversely affected too. According to the World Health Organization, COVID-19 illness is caused by the SARS-CoV-2 virus. The L strain was the first COVID-19 strain ever found, and it was discovered in Wuhan, China, in December 2019. Since the virus quickly evolved into different strains beginning in early 2020—and that was before any of us were concerned about COVID-19 variants-no one really recalls it. China and a few other Asian nations at the time that had witnessed the SARS pandemic in 2003, were on 'high alert'. In January 2020, 'the Chinese government put several cities on lockdown, although the coronavirus was still encroaching on the United States at that point.' Although some people may have moderate to severe respiratory issues, the majority of them will recover without any additional care.

The majority of population won't need medical attention. People over the age of 65 and those who have had previous medical disorders including diabetes, chronic lung disease, cardiovascular disease, or circulatory disease are more likely to suffer from

serious illnesses. COVID-19 has the capacity to infect individuals of all ages and result in severe sickness or death. Education about the disease and its transmission is one of the most effective ways to prevent & minimize illness. Keep at least a few feet away from other people, put on a mask that fits properly, wash your hands frequently, or wipe your hands with anything that includes alcohol to prevent spreading contamination to others and yourself. When the moment is right, be vaccinated, and pay attention to local counselling if necessary. Tiny liquid droplets that are produced when a person with the virus coughs, talks, sings, or inhales could spread the infection. From big particles in the respiratory system to small aerosols in the air, these particles come in all shapes and sizes.

Initially India fought well with this virus due to its ingrained immunity in citizens and hence, in ratio to the population of India death rates as well as infection or hospitalization rates were low. But slowly as soon as the world adverse towards second and third wave the death rate and infection rate increased around the world due to which Public Health became an emerging concern for country. With the realization of fact of lack of hospital beds, oxygen masks and technological

advancements, people were being advised to stay home. Due to this, a need was felt in making some amendments to the Public Health regulations as well as other miscellaneous laws to cope up with the situation. The lack of infrastructure as well as a proper medical and legal framework became a lesson for India to look into lacunas that appeared on its face. As a result, the enactment for amendment begins with a variety of rules, laws, and regulations regarding governing guidelines for procedural areas of people's lives, covering medical and healthcare in addition to police administration and courts. It was 26 November 2021, 'that WHO declared that the world was facing a new variant of concern: Omicron. It would go on to change the trajectory of the COVID-19 pandemic.'

#### A Timeline of COVID-19 Variants:

The L strain was the first COVID-19 strain ever found and, 'it was discovered in Wuhan, China, in December 2019.' Since the virus quickly evolved into different strains from the beginning of 2020—and it was before any of us were concerned about COVID-19 variantsno one really recalls it. China and a few other Asian nations at the time that had witnessed the SARS pandemic in 2003 were on full edge. In January 2020, the Chinese government put numerous cities on lockdown, although the coronavirus was still encroaching in the United States at that time. The 'World Health Organization' opted to designate each notable variant by using 'Greek alphabet, commencing with Alpha, as COVID-19 started undergoing further devastating mutations.' The most prominent variants, how they have influenced the pandemic's trajectory, and the most recurrent symptoms are outlined underneath.

## 1.1 Alpha (B.1.1.7)

The primordial L strain had undergone massive transformations by the end of 2020, along with the S, V as well as G strains. Alpha (B.1.1.7), the first widely reported variation, debuted in the UK in September 2020. Even before coronavirus vaccinations were accessible, it led to an increase in outbreaks throughout

<sup>1</sup> Centres for Disease Control and Prevention and National Center for Health Statistics, 1999. Underlying cause of death 1999-2013 on CDC WONDER online database, released 2015. Data are from the multiple cause of death files, 2013.

the world. In contrast to the original strain, this mutated version proved more lethal.

Several chronicled symptoms of this strain, such as – "loss of taste or smell, fever, dry coughs, shortness of breath, headache, sore throat, congestion or runny nose, nausea or vomiting, and diarrhea" were also recorded.<sup>1</sup>

#### 1.2 Beta (B.1.351)

The Beta version (B.1.351), which was detected immediately afterward Alpha, was first uncovered in South Africa and soon spread to other nations very rapidly. This variety always only responsible for a very small portion of the total cases in the globally, according to a CDC estimate, despite being nearly 50% more contagious than the previous strain.

#### 1.3 Gamma (P.1)

In November 2020 in Brazil, the Gamma version was first spotted. In the globally, it was the cause of a small number of COVID-19 cases. Gamma was not as transmissible as Alpha or Delta, this conclusion was made by many experts, despite the lack of data on this version.

#### 1.4 Delta (B.1.617.2)

In 2021, 'the Delta edition dramatically impacted the world. First it gained traction in India and eventually speeded to over 130 nations triggering a devastating wave of infections.' Numerous investigations revealed that compared to other versions, Delta caused more serious illness and hospitalization in unvaccinated individuals. This strain succeeded to elude vaccineinduced susceptibility despite the nations having already begun its mass vaccination campaign against it. In one of the studies, it was discovered that the patients who had received their full course of vaccination were also infected (even they were more than 70% out of the total infected person). The outbreaks spurred health officials all over the globe to encourage patients to seek a booster shot. The three most typical symptoms were headache, sore throat, and fever.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Baker, J.M., Nakayama, J.Y., O'Hegarty, M., McGowan, A., Teran, R.A., Bart, S.M., Mosack, K., Roberts, N., Campos, B., Paegle, A. and McGee, J., 2022. SARS-CoV-2 B. 1.1. 529 (Omicron) variant transmission within households—four US

#### 1.5 Delta AY.4.2 (Delta Plus)

A derivative of the Delta version was Delta AY.4.2, commonly termed as Delta Plus. The spike protein in it, which enable the virus to enter and infect cells, exhibited two alterations. It was anticipated to transmit between 10% and 20% more often than Delta<sup>3</sup>.

### **1.6 Omicron (BA.1)**

Initially discovered in late November 2021, the primary Omicron strain outperformed Delta as the dominant variant. Despite the highly evolved variant's high level of transmissibility, several investigations revealed that it resulted in milder illnesses and a lower morbidity rate. Headache, sore throat, runny nose, coughing, and exhaustion are the most typical symptoms.

#### 1.7 Omicron BA.2

Omicron subvariant BA.2 was originally referred to as a "stealth" version by the media since it was so difficult to find and follow. According to the WHO, BA.2 outgrew the original Omicron by having a "growth advantage." Around March 2022, it began becoming more common in the northern nations. The most prevalent symptoms were comparable to those of BA.1 and BA.2

#### 1.8 Omicron BA.2.12.1

By May 2022, the BA.2.12.21 variation, an offshoot of the Omicron BA.2, was responsible for the bulk of new cases in the northeastern nations. It had seven additional mutations in addition to around 20 from the original Omicron. Thought to be more contagious than its forerunners, the infection would mostly stay in the upper respiratory tract rather than progressing farther into the lungs.<sup>4</sup>

#### 1.9 Omicron BA.4 and BA.5

Around May 2022, 'Omicron BA.4 and BA.5 first debuted.' According to data, these two subvariants of Omicron are better able to elude immune defenses than

earlier iterations of the virus, leading to reinfections even in those who have recently recovered from COVID or got a booster shot. Common symptoms include a sore throat, a cough, and a hoarse voice.

### 1.10Omicron B.Q.1 and B.Q.1.1

B.Q.1 and B.Q.1.1, who are BA.5's progeny, make up around 11% of COVID-19 cases in the globally as of October 2022. Since they are a member of the BA.5 family, bivalent boosters ought to provide defense against these subvariants. Early research, however, raises the possibility that monoclonal antibody medications are also ineffective.

#### 2. India at a Close Glance:

India was hit by the Covid-19 by the end of March, 2020 By the end of March 2020, when the majority of European and Asian nations had already experienced the pandemic and the preponderance of governments had indeed taken the necessary steps to combat it. During this time, the Indian Government tried to follow the modern western rule of dealing with Covid-19, essentially the Decree method adopted by France and Italy but India did not consider the many factors in its way. While the Decree method was adopted by France and Italy, that had comparatively lesser population density across the country and lesser young population<sup>5</sup>, India was composed of different factors and characteristics. The drastic decision of the Indian government to impose a nation-wide lockdown essentially disrupted the lives of the citizens and it became a battle between life and death for the people living below the poverty line. The sudden halt of every transportation system caused a great panic across the country and all the workers from different parts of India started to migrate from their place of work to the place of residence. In the midst of all this upheaval, millions of migrant workers travelled thousands of kilometres to get home in order to buy food for themselves, and the

jurisdictions, November 2021–February 2022. Morbidity and Mortality Weekly Report, 71(9), p.341.

<sup>&</sup>lt;sup>3</sup> Duong, D., 2021. Alpha, Beta, Delta, Gamma: What's important to know about SARS-CoV-2 variants of concern?

<sup>&</sup>lt;sup>4</sup> Brown, C.M., Vostok, J., Johnson, H., Burns, M., Gharpure, R., Sami, S., Sabo, R.T., Hall, N., Foreman,

A., Schubert, P.L. and Gallagher, G.R., 2021. Outbreak of SARS-CoV-2 infections, including COVID-19 vaccine breakthrough infections, associated with large public gatherings—Barnstable County, Massachusetts, July 2021. Morbidity and Mortality Weekly Report, 70(31), p.1059.

<sup>&</sup>lt;sup>5</sup> Supra

Indian government practically did nothing to help them<sup>6</sup>.

The Indian government furthermore attempted to put into practise a number of other tactics in addition to the nationwide lockdown, including the mandate approach of China and also the increase strategy used by Japan during the second wave of COVID-19. However, the combination of all the other techniques only served to further confuse the population, and the absence of sufficient laws, regulations, and other tools to implement the necessary pandemic plans made things extremely challenging for the county's populace.<sup>7</sup> While the nation-wide lockdown showed a great promise that Indian might be the first country to restrict the spread of Covid-19 with such a huge population, it was not the case and the same was detected during the second wave of the Covid-19. The disrupted strategies of Indian Government necessarily weakened the economics, confused the general public and disrupted the lifestyles of many poor workers by leaving them jobless.8

It is important to note that the Indian government essentially absorbed other nations' strategies and implemented them all under one roof. It is clear from the timeline of India's involvement in COVID-19 combat that India had taken different approaches to alternative techniques of numerous countries over the course of various phases. From the Indian government's strategy, it is clear that the country initially enforced a nationwide lockdown that abruptly and without prior notice halted all daily activities and household tasks. All the people were advised to stay in the cities they were residing and restricted them from coming to their home town. However, this nationwide lockdown only continued for 2 months and from June onwards, the unlock process started with minimal effect of the transportation. From June onwards, slow and steady unlock process has been one of the strategies of the Indian government<sup>9</sup>.

To everyone's astonishment, India significantly reduce Covid instances, and by the end of 2020, it had surpassed China as the nation with the second-highest number of Covid-19 cases and deaths. The answers to the question of why India failed to adhere to the Covid protocol are concealed inside the factual variations and cultural traits therein. One of the main reasons as to why India failed at following a strong Covid protocol is to provide for lockdowns as the only strategy. While China, France and other Western and Asian countries essentially imposed several other restrictions, health facility and social activity such as social distancing rule, India did not impose any of those. It is true that India had tried to impose such strict restrictions of social distancing and many other rapid test facilities in many states but due to the rural factor of Indian governments, the lack of education among the citizens essentially became the biggest obstacles. Almost 95% of the Indian workers, working in different states of India are informal and thus the employers of such workers were not entitled to provide the employees with any kind of benefits during the lockdown situation which eventually created the severe situation of migrant workers<sup>10</sup>.

The imposition of lockdown in different country was not done with an aim to curb the cases of Covid-19 but to provide the governmental authorities with some time to understand the severity of the virus and come up with the second plan of action. Hence, the government is supposed to come up with new and upgraded standards and measures to combat the ongoing situation of Covid-19 once the Lockdown is lifted. Among many other measures, the important steps that a government should take in order to combat Covid-19 are as follows: increasing the size of the public health facility and

<sup>&</sup>lt;sup>6</sup>Ghosh, J. "A critique of the Indian government's response to the COVID-19 pandemic." J. Ind. Bus. Econ. 47, 519–530 (2020)

<sup>&</sup>lt;sup>7</sup>M.Z.M.Noman, Mohammad Rauf, Zubair Ahmed, Tarique Faiyaz, Saif A.Khan& Madiha Tahreem. "Quarantine Law Enforcement & Corona Virus(COVID-19) Pandemic in India" (2020) Journal of Xidian University, 12(4): 536-542

<sup>&</sup>lt;sup>8</sup>Shamasunder, Sriram, et al. "COVID-19 reveals weak health systems by design: why we must re-make global health in this historic moment." *Global Public Health* 15.7 (2020).

<sup>&</sup>lt;sup>9</sup> Karotia D, Kumar A (2020). A Perspective on India's Fight against COVID - 19. Epidem Int; 5(1): 22-28.

<sup>&</sup>lt;sup>10</sup> Zodpey, S., Negandhi, H., Dua, A., Vasudevan, A., & Raja, M. (2020). Our Fight Against the Rapidly Evolving COVID-19 Pandemic: A Review of India's Actions and Proposed Way Forward. *Indian journal of community medicine : official publication of Indian Association of Preventive & Social Medicine*, 45(2), 117–124. https://doi.org/10.4103/ijcm.IJCM 221 20

establish better health infrastructure and deploy public health force. Also, lockdown is the time to provide the authorities with the time to provide for better quarantine system and centre and better health care plan for the affected persons. However, the same was not the case with India and the Central government essentially failed at doing the needful during the time of the lockdown. The efforts made by the State and the Central government only made it tougher for people to commute and understand the seriousness of this virus. The funds provided by the Central government with an aim to meet the needs of the public health sector, the authorities are reported to spend only a meagre portion of the GDP only. Hence, apart from some of the states of India such as Kerala, none of the states of India dealt with Covid-19 in a smarter way and lockdown became essentially ineffective. It took about 2 months for the government to conduct rapid testing or more increasing rate of testing in different areas of India. In the month of July, 2020, the rate of testing essentially grew to 5371 testing per million but the same was moderately low rating. Supplies of basic equipment, such as personal protective equipment for health-care workers, were not organised in a timely manner, and shortages of these items emerged quickly as the disease grew in severity. Other facilities, such as hospital beds, ventilators, and so on, were also significantly undersupplied compared to the demand.

#### 3. Omicron- a New Variant of Covid Family

The COVID-19 pandemic has indeed been triggered by the coronavirus for almost two years, and the omicron is its most recent variation. It was only recently discovered in South Africa, but since then, it has spread to over 30 different nations. In addition to causing an increase in cases within South Africa, it moved quickly to other countries as well. It could have also started in Europe and gone unnoticed until much later. Due to the fact that this variation is still extremely new, there is still very little information accessible about it. For this reason, every information must be carefully considered, and attentiveness must be cultivated toward any new results.

According to observations made so far, this variant may be 4.2 times more contagious in its early stages than the other variety that is currently producing illnesses, the Delta variant. Experts from the WHO have emphasized that it is unlikely to result in an infection that is more severe than the Delta variety. Additionally, it has been

indicated that the vaccines currently being distributed should be effective against the omicron strain, just as they have been against other versions.

The government has highlighted repeatedly that people must adhere to COVID requirements, which include wearing masks, using hand sanitizer, and keeping a distance from others. The WHO has also stated that everyone must continue to abide by the rules that have been put in place during the pandemic and that relying solely on travel restrictions is insufficient. International flight restrictions have also been put in place by India.

Although it is still unclear whether the variant is to blame for the nation's massive growth, various nations, including India, have instituted travel restrictions and sanctions on visitors from South Africa and other African nations.

### 4. Legislation so Far

During the challenging periods of COVID-19, we frequently heard the terms "lockdown," "curfew," "quarantine," and "isolation." All of the other terms—aside from lockdown and curfew—have a legal connotation and are defined in various Indian laws. During the Coronavirus lockdown, these provisions have been used.

The government took refuse under, 'the Epidemic Diseases Act, 1897, on March 11, 2020 by implementing social distancing and the voluntary public curfew norm in the country. The time assessed quarantine law enforcement under Sections 188, 269, 270, and 271 of the Indian Penal Code, 1860, and Section 133 of the Criminal Procedure Code, 1973. The promises and pitfalls of the 160 years old Indian Penal Code, 1860, and 123 old Epidemic Diseases Act, 1897 in controlling the horrendous dimension of novel COVID-19, was considered at great length and breadth. It eventually led the nation-wide Lockdowns-I (March 25, 2020, to April 14, 2020), II (April 15, 2020, to May 3, 2020), and III (May 4, 2020, to May 17, 2020) by invoking Sections 6, 10, 38, and 72 of the Disaster Management Act, 2005. The catastrophic COVID-19 pandemic declared a calamity believing it beyond the coping capacity of the community and necessitates emergency measures.'

The execution of these laws left the safety and security of public health professionals and the delivery system on a high vulnerability note. It posed an unprecedented

challenge to the public health system and paraphernalia and put a plethora of public health legislation on trial in epidemic-pandemic syndrome as the Constitution of India does not provide for a 'health emergency' or 'social emergency'. There is a systemic gap which can be drawn back to the legal framework

'An attempt was made to replace the Epidemic Diseases Act to tackle inevitable health crises inflicted by epidemics or bioterrorism in the future. The Public Health (Prevention, Control and Management of Epidemics, Bio-Terrorism and Disasters) Bill was drafted in 2017 as a joint effort between The National Centre for Disease Control (NCDC) and the Directorate General of Health Services (DGHS). This Bill would have been the precise legislation to put into effect when COVID-19 struck. On the other hand, the vast literature, experiences, failures and successes emerging from the response to the outbreak in these months can act as an essential guide to drafting an improved version of the Public Health Bill, 2017.'

The disaster management act, 2005 was implemented for the effective management of disaster and related matters, because of the nature of COVID-19 as it had high infectious rate – as it created pandemic situation in India. The powers to direct lies with the central government. If any authorized person is obstructed in the discharge of his function under this act or that if that person refuses to comply with any direction given by the central or state government or an authorized person shall on conviction be punishable with imprisonment which may extend to one year or fine or both. If such action could cause loss of life or any imminent danger shall be imprisoned for a term extended to two years.

As regard to the latest variant only international travel restriction are imposed. We still lack backbone legislation in this regard. Guidelines for foreign visitors arriving in India have been updated by the Ministry of Health & Family Welfare (MoHFW). These reportedly became effective on January 11, 2022. According to the regulations, travellers coming from or departing from "at-risk" nations would now be subject to "strict isolation" if a test is positive upon arrival.

This action follows an increase in cases of the new variety, Omicron, across the nation. The airline firms are expected to advise travellers who are transiting through or arriving from "at risk" nations that they would be subject to post-arrival screening and

protocol-compliant quarantine at Indian airports. Also take note that overseas travellers won't be permitted to leave the airport prior to the test results.

Besides that, all foreign visitors to India will need to register on the Air Suvidha portal, self-declare all of their travel information, upload the COVID-19 negative report that was obtained within 72 hours, confirm its authenticity, and submit an undertaking that they would abide by the appropriate authority's decision to submit to quarantine in accordance with the updated rules. Furthermore, when arriving in Indian airports, foreign travellers must pre-book their tests. Here are the guidelines for travellers arriving from countries at risk:

- "Submit a sample for post-arrival COVID-19 test at the airport, which would be self-paid.
- They will have to wait for their test results at the airport before leaving or taking a connecting flight.
- If their test results come negative, they will undergo a 7-day home quarantine, and will again have to undertake the RT-PCR test on the 8th day of arrival in India.
- Travellers will also have to upload the results of a repeat RT-PCR test for Covid-19 done on the 8th day on Air Suvidha portal, which will be monitored by the respective States/UTs.
- If their test result comes negative again, they will be required to further self-monitor their health for next 7 days.
- But if they test positive, their samples would be sent for genomic testing at INSACOG laboratory network.
- Those tests positive, will be managed at an isolation facility and treated as per laid down standard protocol including contact tracing.
- Those who came in contact with such a positive case, would be advised to undergo home quarantine, which will be monitored strictly by the concerned State Government."

Here are the India International Travel Guidelines for travellers arriving form not 'at risk' countries:

- "Around 2% of the total flight passengers will undergo post-arrival testing, which will be carried out randomly at the airport on arrival.
- They will be identified by the concerned airlines.
- Laboratories will prioritise testing of samples from such travellers.
- All incoming passengers, as well as those 2 per cent whose result has come negative, will have to undergo home quarantine for 7 days, and shall undertake RT-PCR test on the 8th day of arrival in India.
- They will then have to upload the results of the repeat RT-PCR test for Covid-19 done on 8th day on Air Suvidha portal, which will be monitored by the respective States/UTs.
- If the result is negative, they will be required to self-monitor their health for the next 7 days.
- However, if their result comes positive, their samples should be further sent for genomic testing at INSACOG laboratory network.
- They will then be managed at an isolation facility and treated as per standard protocol, including contact tracing"

#### 5. Conclusion

The outbreak of coronavirus disease 2019 (COVID-19) has created a global crisis and its impact are devasting. The Government of India has taken some steps but it was far more difficult for them to reach hundreds of populations as India is very vast. As regard to the latest variant only international travel restriction are imposed. Initially India fought well with this virus due to its ingrained immunity in citizens and hence, in ratio to the population of India death rates as well as infection or hospitalization rates were low. But slowly as soon as the world adverse towards second and third wave the death rate and infection rate increased around the world due to which Public Health became an emerging concern for country. We still lack backbone legislation in this regard. Recently, Guidelines for foreign visitors arriving in India have been updated by the Ministry of Health & Family Welfare (MoHFW). The airline firms are expected to advise travellers who are transiting through or arriving from "at risk" nations that they would be subject to post-arrival screening and protocolcompliant quarantine at Indian airports.

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