

Is Omicron, the New Variant, Deadlier than the Previous Strains?

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Editorial

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Editorial

The advent of coronavirus shook our world and daily lives causing over five million deaths throughout the world during the past two years [1]. The safety measure for this contagious and transmittable caused by pandemic requires physical and social distancing. Many mutated variants of original SARS-CoV2 have been identified. At present the variant of high concern is Omicron or B.1.1.529. Omicron was detected in South Africa and Botswana at the starting of November 2021 [2]. It was first identified by the scientists of South Africa as the result of using genome sequencing to determine an alarming increase in cases. The most terrifying is the high number of mutations [3]. It was said in the beginning that omicron is more harmful and deadlier than the previous ones and spreads easily. Up till now, it has spread to fifty-seven countries including Belgium, Israel, the United Kingdom, Germany, Austria, and Denmark along with African countries. This variant has around 32 mutations, of which some are bothering [4]. Not much is known about its severity and transmissibility and nothing can be concluded just based on sequence features alone [5]. The South African scientist who identified omicron said that there is a possibility that the HIV patients are responsible for Omicron variants [6]. The possible influence of the virus mutation is based on previous strains' mutations as compared to the lab test results. The virus attaches itself to the cells using the spike proteins and this is how it infects the community. Out of 32, fifteen mutations participate with the spike proteins in binding to specific antibodies and also to ACE-2 receptors (found in the nose) [7].

According to World Health Organization (in a written statement to a German Broadcasting company, Deutsche Welle on Tuesday 30th November 2021), "It is not yet clear whether infection with omicron causes more severe disease compared to infections with other variants, including [the delta variant], preliminary data suggests that there are increasing rates of hospitalization in South Africa, but this may be due to increasing overall numbers of people becoming infected, rather than a result of a specific infection with omicron" [8].

Scientist needs more data before coming to any conclusion. It was said by GlaxoSmithKline drug makers found that COVID 19 treatments were effective against this variant ad further in vitro studies are being carried out to know more about it [9]. The experts from South Africa are also confident that the existing vaccines can be effective against omicron [10]. According to Pfizer, the booster shots will be enough to protect us from the omicron variant. However, the new variant can be worst as no one knows how serious the condition may be in the future and there may get the need for the development of a new vaccine [11].

Apart from the number of mutations the increasing case, there is no definite evidence regarding the transmission at present. No reliable conclusion can be made regarding the transmissibility of omicron variant without the knowledge of the increase in genetic sequencing throughout the world and other factors like rates of vaccination and booster, population density and age distribution etc. All this will require time and also the determination that the precautionary conditions have been fulfilled [12].

References

1. Hopkins J (2020) CS Coronavirus COVID-19 (2019nCoV).

- 2. Gu H, Krishnan P, Ng DY, Chang LD, Liu GY, et al. (2021) Probable Transmission of SARS-CoV-2 Omicron Variant in Quarantine Hotel, Hong Kong, China, November 2021. Emerging Infectious Diseases 28(2).
- Vaughan A (2021) Omicron emerges. New Sci 252(3363):
 7.
- 4. Chen J, Wang R, Gilby NB, Wei GW (2021) Omicron (B. 1.1.529): Infectivity, vaccine breakthrough, and antibody resistance. arXiv preprint, arXiv:2112.01318.
- 5. Callaway E, Ledford H (2021) How bad is Omicron? What scientists know so far. Nature 600(7888): 197-199.
- 6. Healy M (2021) Did failure to adequately treat HIV patients give rise to the Omicron variant? Los Angeles Times.
- 7. Baxter AL, Schwartz KR, Johnson R, Rao A, Gibson RW, et al. (2021) Rapid initiation of nasal saline irrigation:

hospitalizations in COVID-19 patients randomized to alkalinization or povidone-iodine compared to a national dataset. medRxiv, pp:1-14.

- 8. Burnett S, Schmidt F, Pardo E (2021) COVID: How dangerous is the omicron variant? Science.
- 9. Mellor S (2021) Scientists push back against idea that Omicron is more dangerous than other COVID variants. Fortune.
- 10. Torjesen I (2021) Covid restrictions tighten as omicron cases double every two to three days. BMJ 375.
- 11. Herper M (2021) Pfizer research head envisions a sprint to develop Omicron vaccine, if it's needed. Biotech.
- 12. Lusczek ER, Ingraham NE, Karam BS, Proper J, Siegel L, et al. (2021) Characterizing COVID-19 clinical phenotypes and associated comorbidities and complication profiles. PloS one 16(3): e0248956.

