LETTER TO THE EDITOR

Omicron-The Variant of Concern Knocks the Door of Pakistan

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Introduction

Emerging variants of SARS-CoV-2 are being identified across the world leaving continuous challenges for the scientists, vaccine and drug inventors, general populace and the entire international public health fraternity. World Health Organization (WHO) has labelled some variants “Variants of Interests (VOIs)” or “Variants of Concerns (VOCs)” due to their ability to change and alter the virus’ properties significantly (1).

It was 24 November 2021, when “B.1.1.529” variant was reported to WHO from Republic of South Africa (2). The scientists of South Africa and Botswana alerted the entire world about this fast-spreading newly reported variant (3). The first confirmed B.1.1.529 infection was from a specimen collected on 9 November 2021. (2). It was 26 November 2021, when WHO called and labelled this variant as “Omicron”, on the recommendation of “Technical Advisory Group on Virus Evolution” (TAG-VE) for WHO (4). So far it has been reported in 38 nations (5).

Researchers from all over the world are now racing to understand about the threat this variant has been imposing (3). The major concerns regarding omicron include whether or not it is more contagious or severe than other VOC’s and whether it can circumvent the vaccine protection. Clinical and immunological data are not available up till now. So far more than 30 mutations of Omicron have been recorded (6). These mutations lead to increased transmissible, higher antibody escape and enhanced viral binding affinity. COVID-19 vaccines manufacturers are thinking about the adjustment of their products in order to protect against this newly detected variant (7, 5,8).

On the basis of available data from previously reported VOCs, individuals who are jabbed are expected to have a lower threat of severe ailment from omicron infection. Extrapolations based on preliminary observations and already known mutations, indicate that omicron might possibly spread faster and might also escape antibodies more readily than previously reported variants, thus increasing cases of re-infection and cases of minor breakthrough infections in vaccinated individuals. Approach of getting vaccination at a national level and public health preventive measures (mask wearing, avoidance of enclosed spaces, physical distancing, and maintenance of hand hygiene and preference of outdoor gathering) are expected to be an effective strategy (9).

According to the National Command and Operation center (NCOC), it will be almost impossible to halt it from entering our nation as the entire world is very much inter-connected in this era. The minister also told that we had already banned air travels from Omicron affected nations and Government is also planning to administer the booster dose to the citizens of fifty years and above as well as the Healthcare workers (10).
A possible case of Omicron surfaced in Karachi and all three samples have been sent for genome sequencing (11). Reports showed that the effects have been mild cases but transmissibility has increased. In a country like Pakistan, where tertiary healthcare system has already been under extreme pressure, the increase in transmissibility will create unprecedented problems. If new guidelines and protocols are not set in place, the effects will be disastrous (12).

Vaccination rate in Pakistan has been abysmally low as compared to other countries. While internationally the new variant does not seem to have wreaked havoc, it can be potentially dangerous for Pakistan’s unvaccinated population, once again burdening the healthcare system. It is important to trace the origins of the new variant and take concrete measures to stop the spread. Genome sequencing centers are the need of the hour and must be developed rapidly across the country (13).

Despite initial reports that the spread is due to travelling, recent tracing on the new variant in European countries has shown that the variant has developed inside the borders. No deaths have been recorded due to the new variant so far but the number of cases detected are too low to make a concrete assumption (European Centre for Disease Prevention and Control, 2021). Travelling bans and isolating entire regions might not be ideal in this situation because the spread of the disease does not simply rely on this, countries have to be careful as to not alienate other nation states in this time of distress (13).

A consistent increase has been observed in the UK according to the latest reports. Every 2 – 3 days, there is a significant increase in the affectees. The country has been advised to brace itself for a million cases by the end of the December. The steep trajectory of the various has raised alarms in the country and is expected to outcompete the Delta variant. The UK Health Security has estimated that at this rate, it is likely that the number of infections will likely be 20 times higher than the number of confirmed cases. However, people with previous vaccinations and booster doses will not be affected as such, people with waned vaccinations are more at risk (14). While not fatal, as per the limited cases studied, Omicron is highly transmissible. South African experts have listed fatigue, mild fever, scratchy throat, night sweats, body ache and dry cough to be the symptoms seen in Omicron patients. Sense of smell and taste are no longer affected in patients, making it harder for the person affected to realize the virus’s presence (15).

According to recent studies, it has been detected that no vaccines have proved successful in stopping the new variant from spreading but the effects recorded are mild as compared to the previous variants. While the Delta variant was deadly, this new variant has proven to be more contagious. Not enough cases have been studied to provide firmer conclusions as to the effects of the virus (16).

Vaccine protection is likely to wane in all vaccines which have been administered. Currently tests are being conducted on blood samples taken from Omicron patients to understand the effects as well as how the vaccine reacts to the new variant (17).

References
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