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# Is Omicron Variant of COVID-19 Threatening Health Like Other Variants?

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Dear editor,

World health organization (WHO) designated the variant B.1.1.529 a variant of concern, named Omicron, as a fast-spreading SARS-CoV-2 variant, on 26 November 2021 which started from Southern Africa. In addition to the new mutations (more than 30 mutations in the spike protein), Omicron also carries mutations similar to the alpha, beta, gamma, and delta variants of coronavirus, and is collectively known as the fifth most disturbing variant [1-3]. How Omicron variant originated is very important. Summary of Science report revealed that many mutations that have occurred in the spike protein gene of the omicron variant are very different from the gene of this protein in other variants, including alpha and delta variants showing that the new variant is not derived from other variants and has not been created recently, but has long evolved in parallel with other variants [4]. The possible hypothesis is the emergence of a variant in people who have a chronic coronary infection and whose immune system is unable to suppress the virus, or if the infected person has a weakened immune system due to another disease such as AIDS. Another possibility is that the virus was transmitted from human to animal, many mutations were made there, and the virus was transmitted from animal to human again [4,5]. The hypothesis that Omicron variant is a transmission among HIV infected people made from a case report of a young woman in South Africa with HIV infection that carried SARS-CoV-2 infection for more than six months. The pattern of Omicron variant also observed in another patient whose SARS-Cov-2 infection lasted longer [5]. According to the Network for Genomics Surveillance in South Africa, both beta (501Y.V2) and Omicron (B.1.1.529) originated from Southern Africa with lowest vaccination coverage in which some countries in Southern Africa have less than 1% coverage for COVID-19 vaccination [6]. Omicron has been shown to be about 500% more contagious than Wuhan, and up to 70% for the Delta [7-9]. Infection with omicron did not show symptoms such as loss of sense of smell and taste, but often developed fatigue, muscle aches, and a mild dry cough that lasted for a day or two, and most of these patients were cared for at home [10]. Still vaccination is the only way to prevent effectively against any type of SARS-Cov-2 variants [11]. Finally, some hopeful features of Omicron derived from the present science to date are as following:

- Vaccination has preventive role against Omicron because it is frequent in area with lower COVID-19 vaccination coverage especially in young people without vaccination
- Booster dose can be useful due to boosting immune system
- Omicron has mild symptoms with short time periods showing low rate of morbidities and mortalities

- High transmission rate and infectivity of Omicron with mild symptoms are helpful to achieve "herd immunity"
- It is still recommended to use a proper mask, wash hands regularly, observe social distance, properly ventilate indoor spaces, and avoid crowded spaces
- Omicron variant is less likely to be dangerous like previous variants

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