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Correspondence

Emergence of Omicron BA.2.12.1 in Pakistan: What does it mean for the South Asian nation?

Dear Editor

Nearly 6% of the world's population has been infected with COVID-19, yet only 0.03% of the global cases have originated in mainland China, where SARS-CoV-2, the virus causing COVID-19, was first found [1]. China has diligently maintained its Zero-COVID strategy centered around strict travel bans, complete lockdowns, and rigorous testing regimes [2]. Despite these stringent measures, China's resolve in maintaining the Zero-COVID status has been under test in combating the recent explosive rise in cases due to the BA.2 subvariant of Omicron SARS-CoV-2. Studies envisage this subvariant to have greater vaccine-breakthrough ability than other variants of concern, to be 4.2 times more contagious than the Delta variant, and to reinfect individuals previously infected with the BA.1 subvariant [3]. According to the data available, more than 50 countries across the world, including the United States of America, have reported outbreaks associated with the BA.2 subvariant [4]. While the BA.2 subvariant was projected to be responsible for 56.4% of all cases, interestingly, a further offshoot, the BA.2.12.1, has risen in proportion, accounting for 42.6% of samples sequenced across USA during the last week [5].

Pakistan's government announced lifting of all country-wide COVIDrelated restrictions on March 16th as the positivity ratio declined to 1.33%. By the end of March, the positivity ratio had further reduced by half to reach a mere 0.62%, prompting the closure of the country's apex control center on the pandemic, the National Command and Operation Centre (NCOC) [6]. However, situation in neighboring China is alarming as it is occurring despite massive vaccine coverage. The financial hub of China, the city of Shanghai, entered yet another lockdown to combat the rise in cases and is feared to have long-term consequences on the economy [7]. The BA.2 subvariant is supposedly behind this surge and the Chinese vaccines (majorly Sinopharm and CoronaVac) are proving to be ineffective in containing the spread and prevent severe disease [2]. Alongside this, recent unpublished data has also indicated that a previous infection with the original omicron subvariant BA.1 is futile in providing immunity against the BA.2 subvariant (specifically BA.2.12.1) [8]. Until May 2021, Pakistan exclusively vaccinated its population with Chinese vaccines. Even after receiving vaccines via COVAX, a large majority was inoculated with vaccines from China. Due to growing trade relations with China and the geographical proximity meant it was inevitable that this infectious subvariant reaches Pakistan.

On the 10th of April, Pakistan reported its first confirmed BA.2.12.1 case [9]. The ability of BA.2 to evade vaccine protection, the 'stealth' quality of not being detected on PCR testing [4], and the lifting of all COVID-19 restrictions means Pakistan is at risk of another surge that may overwhelm its already underequipped healthcare system. Fortunately, the South Asian country has reinstated the NCOC. While the country's positivity ratio has declined to only 0.28%, the alarm bells have been rung, and public cooperation alongside early preventative

measures will save Pakistan from a COVID disaster.

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Ethics statement

The present study includes printed and published information; therefore, the formal ethical clearance was not applicable for this study.

Consent

NA.

Author contribution

HAA, SA, HSS: conceived the idea, designed the study and drafted the manuscript. HAA, SA, HSS, MMH, SS: conducted literature search and created the illustrations. HAA, MMH: revised the manuscript critically and refined the illustrations. HAA, MMH, and SS: revised the final version of the manuscript critically and gave the final approval.

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Declaration of competing interest

The authors declare that there is no conflict of interests.

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