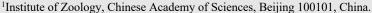


LETTER

Second Wave Scenario of COVID-19 in Pakistan and Combating Strategies

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Open Access

Citation

Khawar, M. B., Abbasi, M. H., Sheikh, N., Riaz, M., Rafiq, M., Farooq, A., Ahmad, Z., Fatima, S., & Amaan, H. N. (2022). Second wave scenario of COVID-19 in Pakistan and combating strategies. *Albus Scientia*, 2022, Article ID e220430, 1-2.

DOI

http://doi.org/10.56512/AS.20 22.1.e220430

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Competing interests

The authors have declared that no competing interests exist.

Dear Editor,

According to WHO, there have been 209,876,613 confirmed cases of COVID-19, and 4,400,284 total deaths to date (https://www.who.int/emergencies/diseases/novel-coronavirus-2019, retrieved on 22nd August 2021, 17:09 PST). Pakistan documented the first confirmed case of COVID-19 on February 26, 2020 (Waris et al., 2020). There were 1,123,812 confirmed cases and 24,923 deaths reported with Sindh being the most affected province with 419,810 confirmed cases followed by Punjab with 379, 574 confirmed cases (http://covid.gov.pk/ retrieved on 22nd August 2021, 17:09 PST). Effective strategy and strict steps taken by the Government of Pakistan have confined the active cases to 89,334 only (http://covid.gov.pk/, retrieved on 22nd August 2021, 17:09 PST). Federal and Provincial Governments of Pakistan took various measures to control its spread well in advance. These measures include a strict screening of travelers, the installation of scanners at exchange routes (airport and land routes), closure of every single educational institute all over Pakistan, and awareness campaigns via public and private media and social platforms (Waris et al., 2020).

Pakistan had reported the second-highest cases in the last seven days (4th-10th August 2021) in the Eastern Mediterranean region with 24127 cumulative deaths, which is alarming (https://covid19.who.int/table). Experts have already warned that the second wave of COVID-19 will strike more badly than the first one. They urged on the continuity of lockdown until the number of cases starts to decrease as developed countries did. WHO has also expressed its concerns that if Pakistan does not take strict measures, then it may become the next epicenter of this pandemic after Europe.

In the present letter, we provide a short-term toll of reported cases, deaths, and recoveries of COVID-19 to forecast the situation in upcoming months under the prevailing circumstances of easing lockdown. The daily-updated data of the COVID-19 epidemic across all provinces of Pakistan have been extracted at (8:25 am PST) between 17th October 2020 to 15th December 2020 from the official website (http://covid.gov.pk/) developed to provide the exact statistics of the COVID-19 pandemic.

We generated a bimonthly cumulative record of COVID-19 from 17th October 2020 to 15th December 2020. Regarding 17th October, 32062 tests were performed out of which 567 cases were reported positive with a mortality rate of 2.12%. From 17th October to 15th November, out of 908,599 total tests performed 36,580 cases were reported positive with 522 deaths. By the mid of November, testing capacity was increased to find out more affected patients and to reduce the transmission rate. On 16th November out of 29378 tests performed on that day, there were 2140 positive cases, 33 deaths, and 1010 recoveries. From 16th November to 15th December, 1,185238 tests were performed, 86,945 cases were positive with 1,850 total deaths, and 64,774 recoveries. Pakistan has witnessed its highest death toll from COVID-19 on 18th November amid the second wave of SARS-CoV-2, claiming 295 deaths in a day with a 2.25% death rate.

The current study highlighted the stats of COVID-19 during the second wave of infection in the country. Following mid-October to mid-December, a gradual surge in the COVID-19 infection rate and death toll have been recorded all across Pakistan. Over these two months, COVID-19 active cases have been increased from 9,296 (October 17, 2020) to 48,369 (December 15, 2020) with a prominent increase of 420%. On the other hand, the total number of positive cases reported from 16-Oct-2020 to 15-Nov-2020 were 36,580 and this number increase to 86941 from 16-Nov-2020 to 15- Dec-2020 so the rise of 138% in the total number of positive cases was recorded in two months whereas the increase in the death toll was 254%. The positivity rate of COVID-19 increased from 3.99% as reported in the first month to 5.02% (http://covid.gov.pk/stats/pakistan) in the 2nd month of study. Probably, imposing smart lockdown and closure of educational institutions immediately amid the second wave of COVID-19 were proved to be effective prevention strategies against the exponential spread of COVID-19. Therefore, the increase in active cases and the total number of deaths is alarming. Similarly, an increase in the positivity rate of tests is a serious concern for Pakistan as it is a direct indicator of the increase in infection rate. The burden of the COVID-19 active cases on hospitals poses serious threats to the lives of healthcare workers due to the unavailability of sufficient personal protective equipment (PPEs) (Amaan et al., 2020). Besides this,

patients suffering from other diseases, especially from chronic health conditions like epilepsy also got affected as they are deprived of basic health facilities (Saleem et al., 2020).

Collectively, several new strains of coronavirus have also been identified in different parts of the World; countries like Pakistan should strictly monitor the situation and design the policies to contain the pandemic accordingly.

References

Amaan, H. N., Khawar, M. B., Abbasi, M. H., & Sheikh, N. (2020). Risk assessment in Pakistani health workers during COVID-19 pandemic. *RADS Journal of Pharmacy and Pharmaceutical Sciences*, 8(2), 126–128. https://doi.org/10.37962/jpps.v8i2.422

Saleem, T., Sheikh, N., Abbasi, M. H., Javed, I., & Khawar, M. B. (2020). COVID-19 containment and its unrestrained impact on epilepsy management in resource-limited areas of Pakistan. *Epilepsy & Behavior*, 112, 107476. https://doi.org/10.1016/j.yebeh.2020.107476

Waris, A., Atta, U. K., Ali, M., Asmat, A., & Baset, A. (2020). COVID-19 outbreak: current scenario of Pakistan. *New Microbes and New Infections*, 35, 100681. https://doi.org/10.1016/j.nmni.2020.100681