

Why Is the COVID-19 Curve on a Decline in Pakistan?

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Letter to the Editor

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In June 2020, the Imperial College of London predicted 2.2 million coronavirus disease (COVID-19) related deaths in Pakistan.¹ To address this situation, COVID-19 twin peaks were observed on June 9 and 13.² The World Health Organization (WHO) informed the Government of Pakistan that it didn't fulfill the preconditioned criteria of relaxing lockdowns.³ However, the rise in the number of cases proved short-lived, as the number of new cases fell distinctly even though none of the WHO's recommendations were effectively implemented.² A new debate started in the country about this rapid decline in the number of cases, as some people would argue that lack of testing is linked with the rapid decline. Others argue that the government is intentionally disguising the number of cases to justify its policy of relaxing lockdowns. However, all of these theories proved wrong because the number of patients recovering from disease were increasing and there was a rapid decline in the demand for pressurized oxygen, ventilators, intensive care unit wards, and personal protective equipment.¹ Addressing this issue scientifically, Braun et al. provided the following justifications that can be linked with the COVID-19 decline in Pakistan⁴:

1. Over time, it is observed that the infected patients developed *S-reactive CD4⁺ T cells*, but these T-cells were also seen in 35% of non-COVID-19 patients.⁴ These non-COVID-19 patients may have developed such cells due to previous encounters with other coronavirus endemics, and these cells may have prevented further infection or severity of disease by the virus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Moreover, SARS-CoV-2 mutations, Bacillus Calmette–Guérin vaccines, and the presence of human leukocyte antigen genotype as host genetic variation may also be associated with the severity of infection and fatality rates.⁵ These factors may have affected the dynamics of the pandemic in Pakistan.
2. Climatic reasons could also affect the severity of the pandemic, because almost the whole Asian continent has escaped from the catastrophe of the pandemic. Like Pakistan, Sri Lanka, Thailand, Vietnam, and many others have seen a sharp decline in the number of cases.³

Although Pakistan has averted the catastrophe somewhat, it is still premature to declare victory in the fight against COVID-19. The most important metric to find success against this pandemic is the number of new cases that are still being reported on a daily basis. Even though the daily number of cases has been down to less than 500,² the curves have not yet flattened completely, as compared with the other countries in the region. Pakistan still stands at the top among such countries that are still reporting the number of cases daily, and it couldn't yet control the local transmission. As long as the number of cases reported due to the local transmission is not controlled, the danger of a second wave of the pandemic is imminent. Strict implementation of standard operating procedures, as observed in New Zealand, will be a prime measure to contain the emergence of new cases.⁶ Until we find solid answers to why this virus didn't create as much of a catastrophe as it created in many other countries, and until we have definitely gotten rid of local transmission, it would be a delusion to think that the fight against the novel coronavirus has been won.

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