

Editorial

The Second Wave of COVID-19: Challenges and Preparations

The challenge posed by the COVID-19 pandemic has over-shadowed all other activities of 2020 and a majority of 2021. At the time of writing this piece, India had recorded more than 33 million cases with 440,000 deaths, making it one of the worst affected countries in the world. Needless to say, the health-care systems were stretched to the maximum, especially during the brutal second wave in April–May 2021. This period was characterised by infection predominantly by the delta strain, thus leading to higher occurrence of severe illness and infections even in the fully vaccinated. This period also witnessed an unprecedented demand, and consequent shortage of oxygen, especially in Delhi which was recording upto 28,000 cases on a daily basis. Several other medications, including steroids were also in short supply. Due to the heavy case load in Delhi, hospital beds were unavailable to many of those who needed it, forcing these patients to take treatment at home. The latter half of the second wave witnessed a new villain with a sudden surge of mucormycosis. It is believed that this occurred predominantly due to excessive/inappropriate use of steroids, especially in immunocompromised persons, such as diabetics. This condition has a high mortality rate that was compounded by the acute shortage of liposomal amphotericin, the first-line recommended treatment of mucor.

Meanwhile, India is trying hard to enhance its corona vaccination coverage. Currently, there are six vaccines approved for use in India, *i.e.*, Covaxin, Covishield, Sputnik, Moderna, Johnson and Johnson, and Zydus vaccines. More vaccines are in the pipeline and likely to be available over the next few months. Each of these vaccines operate via different mechanisms, and there is still no definite data comparing the efficacy between them. Individual data suggests that all these vaccines have more or less comparative efficacy with a reasonably good safety profile.¹⁻⁶ With less than one-fourth of the Indian population fully vaccinated as of now, it is hoped that the availability of a larger vaccine pool in the next 2–3 months will help us achieve our target much sooner. However, vaccine hesitancy remains an area of concern and needs to be addressed urgently. Furthermore, the efficacy and safety of these vaccines in children below 12 years has yet to be evaluated, and

thus, the pediatric population still remains largely at risk from contacting corona infection.

As the second wave receded in most parts of the country, sporadic surges continue in various pockets and total number of daily cases country-wise remains between 20,000–40,000. Thus, the wave is by no means over yet, and the continuation of COVID appropriate behaviour cannot be over-emphasised. With the lockdown almost fully opened, and schools also opening gradually, it is our collective responsibility to ensure full safety not just of ourselves and our family, but also of the society at large. At the same time, research in this field must continue in order to enhance our understanding of this new disease, both in the fields of diagnostics as well as therapeutics. A concerted and co-ordinated approach involving administrators and medical experts is essential for preparing a plan to prevent further infection surges and to find ways to eliminate this disease.

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