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Title: Second Wave of COVID-19: Emergency Situation in India

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Highlights

The COVID-19 pandemic has so far infected 25385043 people and has taken 280683 lives (18 May 2021). Several infectious variants are circulating in the country, including the B.1.1.7, B.1.351, B.1.617, and B.1.618. Preventive strategies may include a large-scale TTT approach, imposing IPC- 144 or lockdown in the hotspot areas, and mass vaccination.

Rapid Communication

Dear Editor,

Currently, India is experiencing the second wave of the COVID-19 pandemic. It has affected the Indian population at an alarming rate and has so far infected 25385043 people, and has taken 280683 innocent lives (18 May 2021; 8:02 pm IST). The second wave is spreading rapidly and has severely affected the country recently. It is believed to be the second-worst pandemic that has affected the country almost after 100 years. The last menace was witnessed during the 1918 influenza outbreak that claimed 12 million lives. In the current COVID-19 scenario, there is a sharp surge in the daily positivity rate, increasing from 1.62% on 1 March 2021 to around 20% on 13 May 2021 **(Supplementary Fig 1).** The resources have started to exhaust quickly. Hospitals have no ICU/isolation wards left; life-saving drugs are finishing quickly; oxygen supplies are interrupted, and dead bodies are lying everywhere.

It was the third week of April when the SARS-CoV2 virus started to spread more rapidly than ever and recorded a massive surge when the daily number of cases crossed the 2-lakh mark. The poor governance, causal and ignorant behavior of the public enabled the virus to stretch its influence and subsequently gave rise to the second wave.[1] The current situation is out of control, and therefore an urgent and compelling decision is the need of the hour.

Compared to the first wave, the second wave has created more havoc. During the first wave, the central government immediately imposed a countrywide lockdown, restrictions on international travel, and several other strict measures (COVID appropriate behavior) before the cases could surge. The first wave achieved its highest peak in September 2020, where the daily confirmed cases reached up to approximately 0.1 million cases.[2] The country underwent the world's largest and strictest lockdown in different phases from 25 March 2020 to 31 May

2020, followed by unlocking. This somehow helped the public/government prepare for the worst situation and manage the first wave, which is lacking in the present case. Over time, both the public and the government started to take things casually and completely ignored the ongoing pandemic. Mass gatherings (protest/rallies/elections/festival celebrations),[1] non-compliance with COVID protocols, and slow vaccination (around 2% population fully vaccinated) contributed to increased infections. Scientists had already warned to stop pilgrimages and mass gatherings in the recent past, yet the government went ahead to allow such gatherings this year.[3] The second wave is mainly affecting the younger populations.[4] However, a declined trend is seen in the case fatality rate from 3.5% in 2020 (mid-April) to 1.2% in 2021 (mid-April).[2] The scary part is that compared to the previous year, the virus has mutated in more devastating strains and is infecting the young populations exponentially. A mutation in the virus has resulted in some of the most dangerous variants detected in India (UK strain: 20I/501Y.V1or B.1.1.7, South African 20I/501Y.V2 or B.1.351, Brazilian strain P.1, and double mutant Indian variant B.1.617).[5] It is believed that this double mutant variant is highly infectious and contributes to this exponential increase in the second wave. On 11 May 2021, WHO classified B.1.617 as a "variant of global concern" (https://www.reuters.com/business/healthcare-pharmaceuticals/who-designates-india-variant-being-global-concern-2021-05-10/). Recently identified two variants, a triple mutant (B.1.618) in West Bengal and N440K in South India, is also becoming a primary concern for Indian scientists.

India manufactures 60% of the global vaccine[6] and has three vaccines (Covaxin, Covishield/Vaxzevria, and Sputnik V) approved for emergency use. So far, the country has vaccinated 180 million doses to its population. Due to the shortage of vaccines and increased infection rate, the government underwent an amendment in foreign vaccine manufacturer rules, paving the way for other foreign vaccines in the Indian market

(https://www.indiafinancenews.com/explained-the-road-to-foreign-vaccines-the-indian-express/)

Looking at the unavoidable circumstances, the government and the people of India can adopt a multilayer protective approach to stop the spread of coronavirus. A strategy that does not affect the growth and development of a country is needed **(Figure 1).** The effective preventive strategy may include large-scale testing, tracing, treatment (TTT) approach, some strict measures like imposing of Indian Penal Code 144 (IPC) or 14/21 days lockdown in the hotspot areas, international travel ban, a complete ban on political rally/festival celebration/weddings, or other crowd gathering events, strictly implementing the COVID appropriate protocols, and mass vaccination

Author Contribution

SK: Conceptualization, writing, and editing

Funding

No funding was received.

Conflict of Interest

None

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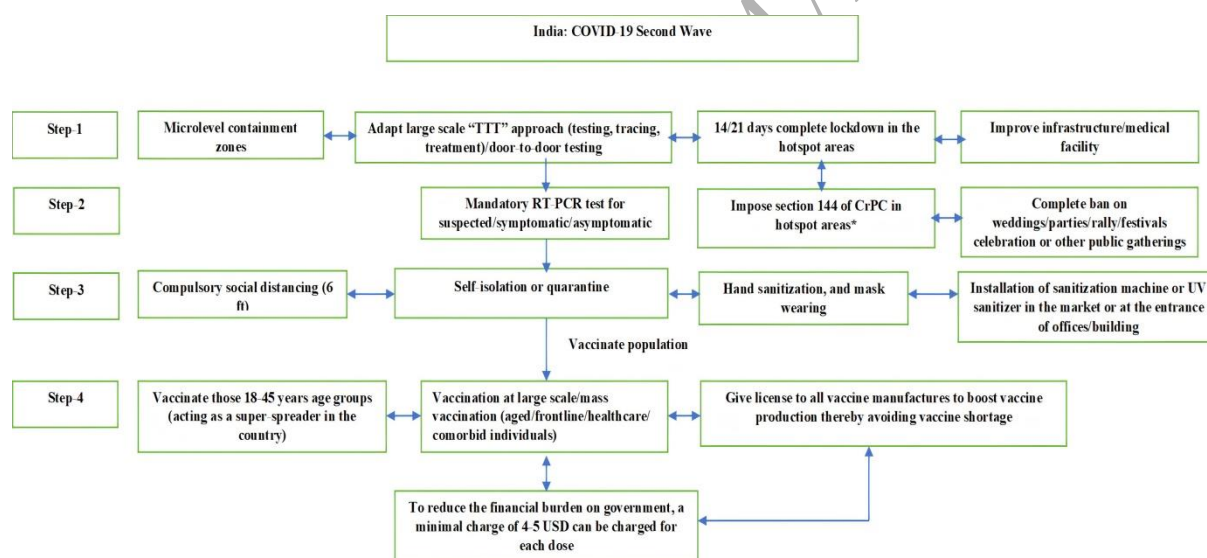
Figure Legends

Figure 1: Multilayer strategy to tackle COVID-19 Second wave (*IPC 144 of CrPC prohibits the gathering of 4 or more people in a particular area)