# LETTER TO THE EDITOR

# COVID-19 vaccination strategies and policies in India: The need for further re-evaluation is a pressing priority

## **Abstract**

India is one of the worst-hit nations by the COVID-19 pandemic and witnessed a devastating impact across cities in the country. Although behavioral measures like wearing a face mask, maintaining social distance, and hand hygiene helped to control the spread of the disease initially, but a long-term action by vaccinating the population is a promising solution. On 16 January 2021, India undertook the challenge to vaccinate 300 million people by August 2021 against COVID-19, the largest vaccination campaign globally. India has been lauded by several prominent organizations around the world for its efforts. But catering to India's massive population is not without its own set of complex challenges. As of 29 July 2021, a mere 9.82 million (approximately 7.03 percent of the total Indian population) people have been fully vaccinated against COVID-19 with the first and second dose, and only 352.5 million (roughly 25.28 percent of the total Indian population) have been partly vaccinated with the first dose. This shows, India's current COVID-19 vaccination policies and plans are still inadequate and not undisputedly equitable even after several amendments in the guidelines. However, even with the second wave abating slowly and steadily in India, there is a need to further re-strategize the current vaccination policy and plans in India against COVID-19 to help achieve long-term positive outcomes in the shortest feasible time frame hoping to evade a third wave.

KEYWORDS COVID-19, India, vaccination policy

### To the Editor,

India is one of the worst-hit countries by the COVID-19 pandemic caused by SARS-CoV-2 and its variants, with over 31, 695, 368 confirmed cases and 424,808 deaths as of 02 August 2021. Adhering to preventive measures against COVID-19 such as maintaining a minimum safe distance, wearing a mask, and hand hygiene continue to be at the forefront in curbing the spread but will not significantly aid in long-term mitigation of the pandemic. The timely and expeditious administration of vaccines to most of the world's population against SARS-CoV-2 has been widely advocated to be the best possible solution to reduce morbidity and mortality associated with COVID-19. However, even with the disastrous second wave now abating slowly and steadily in India, it is pertinent to note that as of 29 July 2021, a mere 9.82 million (approximately 7.03 percent of the total Indian population) people have been fully vaccinated against COVID-19 with the first and second dose and only 352.5 million (approximately 25.28 percent of the total Indian population) have been partly vaccinated with the first dose.

On 16 January 2021, India undertook the challenge to vaccinate 300 million people by August 2021 against COVID-19, in what is said to be the most extensive vaccination campaign in the world.<sup>3</sup> The indigenously produced vaccines, ChAdOx1 nCoV-191 (COVISHIELD™) and BBV152.2 (COVAXIN™), have spearheaded the vaccination drive as soon as the Drug Control General of India (DCGI) had approved the same for restricted emergency use. The two vaccines have been by far the most dominant vaccines used in India. India's initial vaccination strategy was in line with those of other countries around the globe and targeted primarily on administering vaccines to those who are most susceptible and are at risk of developing severe disease from COVID-19 under the guidance of the National Expert Group on Vaccine Administration for COVID-19 (NEGVAC). This included healthcare workers followed by frontline personnel along with individuals who are over 50 years of age with a preference for those over 60. The coverage slow-ly expanded to include all individuals aged 18 or more from May of 2021.<sup>3-5</sup> Recently, the health minister of India has also announced that vaccination for the age group of 12–18 years may commence as early as August 2021, along with the possible introduction of other vaccines.<sup>6</sup>

India has been lauded by several prominent organizations around the world for its efforts. The vaccination plans and strategies against COVID-19 in India have also undergone several amendments and modifications since its inception and improved as well as addressed its earlier pitfalls and drawbacks. However, India's current COVID-19 vaccination policies and plans are still inadequate and not undisputedly equitable (Table 1). It is understandable that vaccinating a country as large and complex as India is not without its own set of difficult challenges, however, the response must be tailored to target the population that is most in need that will therefore help pave a path for better stepwise control of the adverse outcomes of COVID-19 in India.

Inept distribution of vaccines leading to vaccine wastage and inefficient planning in prior procurement of vaccines required for COVID-19 vaccination has led to several instances of shortages during the ongoing vaccination efforts in

TABLE 1 Comparison between the changes in the national COVID vaccination program guidelines as of 1 August 2021

Initial guidelines for Implementation of national COVID vaccination program	First revised guidelines for Implementation of national COVID vaccination program	Second revised guidelines for implementation of national COVID vaccination program
In effect from 16 January 2021, to 30 April 2021	In effect from 1 May 2021, to 20 June 2021	In effect from 21 June 2021
100% of vaccine doses were procured by the central government of India from vaccine manufacturers and provided free of cost to state governments/Union territories to vaccinate all individuals above 45 years of age	50% of vaccine doses were procured by the central government of India and provided free of cost to state governments/Union territories to vaccinate all individuals above 45 years of age	75% of vaccine doses were procured by the central government of India and provided free of cost to state governments/Union territories to vaccinate all individuals above 18 years of age
Vaccine manufacturers sell all their monthly vaccine supplies to the central government of India	Vaccine manufacturers can sell a maximum of 25% of their monthly vaccine supply directly to private hospitals in India and the rest 25% directly to state governments/ Union territories	Vaccine manufacturers can sell only a maximum of 25% of their monthly vaccine supply directly to private hospitals in India
Single tiered pricing system determined by central government of India	Three-tiered pricing system determined by central government of India, state governments/Union territories, and private hospitals	Two-tiered pricing system determined by central government of India and private hospitals (price for vaccines in private hospitals capped at a maximum of 150 indian rupees as service charges in addition to the cost of vaccine as declared by vaccine manufacturer)

the country despite being one of the largest manufacturers of COVID-19 vaccines around the world.8 India's pledge to the COVAX initiative when COVID-19 cases in India were skyrocketing also drew a slew of criticism, which further possibly led the government to relax earlier rules and regulations to fast-track vaccine imports.9

The guidelines laid down for implementing the National COVID Vaccination Program have undergone several revisions in lieu of feedback received from most of the stakeholders involved. The second revised guidelines resulted from several states and small as well as remote hospitals expressing their concerns over difficulties faced in managing funding and logistics related to the procurement of vaccines. However, even the most recent guidelines have scope for further improvement to bolster India's COVID-19 vaccination response. The current service charge that has been capped at 150 Indian rupees is 50% more than the earlier prescribed 100 Indian rupees. This hike in service charge is not strongly justified and will only add to the financial burden of the Indian population, especially those belonging to lower socio-economic strata.

Furthermore, the pricing of vaccines in the private sector is several times the cost at which the vaccines are being sold to the government, creating an exponential burden for the proportion of the population availing vaccines from private hospitals. It has also been noticed that the private sector accounted for only around 7% of the total vaccinations since 1 May 2021, as stated by the Health Minister of India, while it is allocated close to 25% of the total vaccine supply.10 This strongly suggests that re-allocating a much lesser percentage of vaccine supply to private sectors or allocating vaccines based on seroprevalence rates in the given region or rather proportionate to an average number of individuals vaccinated at private vaccination centers would prove more beneficial. Additionally, the need for a third dose for India's population needs to be given due concern due to the predominance of SARS-CoV-2 variants that are being seen around the world. 11

The need to further re-strategize vaccination policy and plans in India against COVID-19 should be emphasized to help achieve long-term positive outcomes by vaccinating as many individuals as possible in the shortest feasible time frame by hopefully considering a more people-centric approach.

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# DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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