



India's Contribution during COVID-19 Pandemic: COVISHIELD and COVAXIN

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ABSTRACT

Coronavirus disease-2019 pandemic is presently wreaking havoc on general public health, food systems, human dignity, and labour around the world. The availability and potential delivery of a safe and effective vaccination to communities around the world is being viewed not only as a means of overcoming these obstacles, but also as a demonstration of human resilience in the face of hardship. Nations must mobilise their resources to ensure widespread access to vaccines, without which the true benefits of development will be lost. Despite its vast internal needs, our country is seen with both hope and anticipation for its ability to deliver at this critical moment in human civilization's progress, and India is more than willing to contribute.

Keywords: Coronavirus disease-2019, COVID-19, COVISHIELD, COVAXIN, India's contribution

INTRODUCTION

Coronavirus disease-2019 (COVID-19) pandemic needs the incorporation of this verse into each nation's national health care mitigation plans in order to limit the impact on the poorest and most vulnerable.¹ The route has been shown; now it is time to walk it, as COVID-19 pandemic continues to affect the entire world, despite diminishing numbers.^{2,3}

As countries put together various types of reaction, from lockdowns and transmission halts to pandemic surveillance and intervention advice, the development and delivery of safe and efficient vaccinations was one of the most eagerly anticipated interventions. The guiding principle of our health care civilizational history has been one of the most beautiful verses, illustrating the full concept of "wellbeing of all". The "health and wellbeing of all," regardless of nationality, group, or race, is central to it.

Vaccines have saved millions of lives every year since they were first introduced. Vaccines assist the human

body recognise and fight the viruses and germs against which they are produced by educating and preparing the immune system.^{4,5} Vaccines, on the other hand, go beyond individualization of their benefits on a bigger scale. We generate a cohort of protected persons capable of offering protection to others as part of the herd immunity by providing vaccination to a bigger population of beneficiaries.^{6,7} The existence of this contradiction makes vaccination not just difficult but also worthwhile.

World's action during COVID-19 pandemic

Governments all throughout the world have took steps i.e. European Union, the United States, and Israel vaccination their health-care workers with vaccines developed by other pharmaceutical companies.^{8,9} More COVID-19 vaccine candidates are in various stages of testing around the world, so perhaps more will be added to this basket in the future. All of these trials are based on the development and distribution of a safe and effective vaccination.

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COVAX the vaccines pillar of the access to COVID-19 led by the World Health Organization (WHO), Coalition for Epidemic Preparedness and Innovations (CEPI) and Global Alliance for Vaccines and Immunization (GAVI), officially Gavi, the Vaccine Alliance (previously the GAVI Alliance) is expected to facilitate equitable access and distribution once such vaccine or vaccines are in the basket.^{10,11}

India's action during COVID-19 pandemic

The Indian government started what is widely regarded as the country's greatest immunisation campaign, relying mostly on two vaccinations i.e. COVISHIELD and COVAXIN made by Indian vaccine makers.¹² First COVISHIELD vaccine is licenced by Oxford–AstraZeneca vaccine (marketed as COVISHIELD by Serum Institute of India) and second COVAXIN vaccine (a vaccine developed locally by Bharat Biotech). The ease with which India was able to reach its captive cohort of health care workers may be replicable in other similar cohorts, such as frontline police officers, but the true test for us will be making vaccines available to those who require them to live their lives without fear of serious infection, such as the elderly or those with comorbid conditions. The numbers to reach are enormous, as is the diversity of location, but the tenacity demonstrated by an average Indian to confront the obstacles in the aftermath of the COVID-19 pandemic inspires hope that the challenge will be met, albeit not without difficulty, but with a great deal of determination.

What is India's position now?

In the next decade or two, the vaccine itself will impact the future of immunisation policies, as governments around the world will need to implement programmes expressly targeting COVID-19 or match COVID-19 vaccination with existing programmes. This will also be guided by the reality that only time will tell whether this vaccine will enter the world market as the vaccine that restored human life to its former glory or as one of a select group of influenza vaccines that are less often used in many regions of the world. However, the hope it has inspired in the midst of the pandemic's doom raises public confidence in the scientific community's skills to a large degree. It was no less of a success that resources were gathered in the wake of lockdowns, where scarcity loomed big, to effectively challenge and defeat the pandemic.¹³

From India's perspective, this is also significant. Our vaccine development has not fallen behind that of any other country, owing to our strong infrastructure for developing and delivering vaccines. But the main problem we face now is making these vaccines available to everyone who needs them around the world.

The vaccination race and its consequences

People are concerned about the vaccine shortage. The WHO, for its part, has raised \$6 billion of the \$7 billion it targeted in 2021 through its COVAX facility

to assist finance vaccine deliveries to 92 developing countries with limited or no means of purchasing vaccinations on their own.¹⁴ However, the truth is that someone must supply the vaccines and deliver them to these countries.

Duke Global Health Innovation Centre analysis of advance market commitments for experimental of COVID-19 vaccine, which mainly focuses on international initiatives such as COVAX and other alliances are very much essential to ensure equitable allocation of vaccines for middle and low income countries, and if present models are followed then no enough vaccines will be available to cover the world's population until year 2024.

India's Contribution

The fact that India produces more than 60% of all vaccines sold worldwide, as well as the fact that its \$40 billion pharmaceutical sector is not yet involved, will be useful.¹⁵ Even in the costlier Moderna and Pfizer pharmaceutical companies, India will continue to play a critical role in helping to immunise much of the world. The development of more cheap vaccinations by Indian businesses to combat COVID-19 is currently in the works. COVISHIELD, a product of the Indian Serum Institute, is currently being hailed as the "world's vaccine."

According to Australia's ambassador to India, Barry O'Farrell said that there are many vaccines being produced in countries around the world after COVID-19 pandemic in India with other diplomats. But India is such one nation has manufacturing capacity that will satisfy the demands of citizens in every country.¹⁶

India's Prime Minister Narendra Modi exemplifies what the world expects of us and how the world views us.¹⁷ India is projected to export safe and cost-effective coronavirus vaccines not only to its neighbours, but also to countries like Brazil and South Africa, with many other low- and middle-income countries on the waiting list. In addition, India is dedicated to educating health-care professionals from all over the world on how to give vaccines safely and effectively.

CONCLUSION

The entire world is watching India, which, despite its enormous domestic needs and resource shortages as a result of a long lockdown is not only looking inward but also going out of its way to fulfil its commitments to the nations in need of relief during these trying times.

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