



Data Shows mRNA Vaccines the Best Boosters Against Covid, Indian Government Must Get Them to India: Dr Gagandeep Kang



Top vaccine expert Dr Gagandeep Kang has urged the Narendra Modi government to figure out a way to bring mRNA vaccines to India, saying that data shows it to be the best booster shot against Covid-19.

Messenger RNA or mRNA technology involves the injection of a small part of the virus's genetic code (RNA) to stimulate the recipient's immune response. It contains instructions for human cells to make proteins that mimic part of the novel coronavirus, spurring the immune system into action. No actual virus is contained in the vaccines. Top mRNA vaccines available across countries are Pfizer-BioNTech and Moderna's shots. Dr Kang, also a Professor of Microbiology at Christian Medical College in Vellore, pointed that India can also wait for its own mRNA platform-based vaccine by Pune-based Gennova Biopharmaceuticals Ltd.

She added that booster shots are not required for everyone, but only for the vulnerable population. "Definitely, there is a need to give boosters to vulnerable populations. There is an absolute need of jabbing boosters to people who are above 60 years or vulnerable and got their shots more than six months ago," Dr Kang, known for the development of rota-virus vaccine, said.

"We have data from study that shows Covishield booster on top of Covishield (vaccination) gives immune response. We don't have any data on Covaxin yet. However, according to the global data (available till now), mRNA vaccines have proven to be the best boosters." "Either the Indian government should figure out how to bring these mRNA boosters in India or we can wait for the launch of Gennova's mRNA vaccine. This vaccine may also work for us," she said.

The world is asking for boosters for a simple reason, explained Dr Kang. She said the available Covid-19 vaccines were the "fastest option" to fight against the pandemic. While most vaccines follow a two-dose regimen, no studies have been conducted yet on the optimum dosage keeping in mind waning immunity.

"We are not yet clear for a very simple reason. Usually, we spend more time on understanding vaccines before launching it," she said. "In this case, we didn't get to look at long-term results. These trials were not designed to test the duration of protection." "In this case," she added, "if we want to understand the incremental increase in immunity, the real world data will only tell us how many doses we actually need at the first step."

According to Dr Kang, while India can think over the argument that people should be allowed to get the shots at private centres based on laboratory tests for antibody levels, there is not enough understanding on "right antibody levels".

The government first needs to announce which tests those will be and what will be the cut-off for that, she said. "Commercial labs generally measure the IgG antibody levels which are the binding antibodies which don't neutralise the virus." However, we are still trying to figure out what should be the cut-off and when it will be wise to take a booster. "Till the date, we only know, more is better. No one has till date decided the cut-off. The higher the antibody level, the better." (Source: News18)

AstraZeneca Booster Significantly Boosts Antibodies Against Omicron



The Covid vaccine, created by Astra and Oxford, saw neutralizing antibodies increase to similar levels as those after two doses against the Delta variant with a booster shot. A third dose of AstraZeneca Plc's Covid-19 vaccine significantly boosted neutralizing antibody levels against Omicron, according to lab studies at the University of Oxford.

The vaccine, created by Astra and Oxford, saw neutralizing antibodies increase to similar levels as those after two doses against the Delta variant with a booster shot, the drug company said in a statement Thursday. A third dose produced higher levels of neutralizing antibodies than those found in individuals who had recovered naturally from the alpha, beta and Delta strains, the company said. The results are largely good news for the vaccine, which has been sidelined in the West as a booster after messenger RNA vaccines were shown to be more effective in various trials. The study looked at 41 people who had been given a third dose.

Data from another lab study showed individuals vaccinated with two doses of Astra's shot retained neutralizing activity against Omicron, although a 36-fold decrease was observed from the original virus strain. Omicron's rapid spread and its ability to initially reduce antibody protection in many vaccines led many countries to launch accelerated booster campaigns. The U.K. alone reported more than 100,000 new Covid cases Wednesday for the first time, heaping pressure on Prime Minister Boris Johnson, who has resisted imposing further restrictions before Christmas.

However, early studies out of South Africa, Scotland and England show the highly mutated Omicron variant appears less likely to land patients in the hospital than the Delta strain. The findings raise hopes there will be fewer cases of severe disease, yet Omicron's greater infectiousness means it could still severely affect health services, fueling the need for boosters.

"It is very encouraging to see that current vaccines have the potential to protect against Omicron following a third dose booster," said John Bell, a professor of medicine at Oxford and one of the study investigators. "These results support the use of third dose boosters as part of national vaccine strategies, especially to limit the spread of variants of concern, including Omicron."

Astra's data come after Pfizer Inc. and Moderna Inc. released studies on how their vaccines stand up against Omicron in recent weeks. Initial lab tests from Pfizer and partner BioNTech SE showed a third dose of their Covid-19 vaccine may be needed to neutralize Omicron after researchers observed a 25-fold reduction in neutralizing antibodies that fight the variant from two doses.

Moderna also found a booster dose increased antibody levels against Omicron. Covavax Inc. said Wednesday that its vaccine generates an effective immune response against the variant, but added it could be necessary to develop an Omicron-targeted vaccine. (Source: NDTV)

Cancer Drug specialist Clinigen Latest Big UK Firm To Be Taken Private



The cancer drug specialist Clinigen has agreed to a £1.2bn takeover deal from a London-based investment firm, becoming the latest big British company to be taken private. Triton Investment Management has offered to pay 883p a share for the company, whose main product is the acquired cancer medicine Proleukin.

Clinigen, which is based in Burton-on-Trent, Staffordshire, said its board had recommended the offer to shareholders, which include the New York hedge fund Elliott Management, with a 7.6% stake.

The news sent Clinigen's share price soaring by up to 15% in early trading, though they later settled at at 901p, up 10.2%.

Elliott declined to comment. It has been reportedly demanding a break-up of Clinigen, but never made its demands public – unlike the pressure it has applied to the drugmaker GSK and the energy firm SSE.

The hedge fund first publicly disclosed a 5.2% stake in Clinigen on 10 September when the share price was 659.5p – meaning it has made a significant gain on its holding since.

Clinigen does not develop medicines itself, but acquires the rights to medicines from drug developers, produces them via contract manufacturers, and distributes them around the world. A growing part of its business is offering services to other biotech and pharmaceutical firms, such as selling their drugs around the world and running clinical trials for them. The group works with 34 of the top 50 pharmaceutical companies.

There has been a flurry of private equity buyouts in recent months. The supermarket group Morrisons was bought for £7bn by the US firm Clayton, Dublier & Rice, which beat off SoftBank-owned Fortress Investment in a head-to-head auction.

David Cox, an analyst at the investment bank Panmure Gordon, has said that the takeover approach of Clinigen was inevitable after its shares fell earlier this year, when it warned sales of its cancer drugs would be lower than expected because of the coronavirus pandemic.

This has mainly hit sales of Proleukin, which is given at hospitals as an IV drip or injection. Clinigen, which employs more than 1,000 people in 14 countries, was created by Peter George from the merger of three healthcare businesses in 2010. He floated the company on the London stock market two years later.

George cashed in part of his stake for £16.5m in 2016 but retained a 3% holding at the time. It is unclear whether he still owns Clinigen shares today. (Source: The Guardian)

On Omicron, WHO Shares A New Concern



Omicron variant: WHO's vaccine advisors warned that a rush to stockpile more jabs would only exacerbate the already glaringly unequal vaccine access around the globe. The World Health Organization (WHO) said Thursday it remained unclear whether additional Covid-19 vaccine doses are needed to protect against the new Omicron variant, and urged wealthy countries to avoid hoarding the jabs.

The UN health agency's vaccine advisors warned that a rush to stockpile more jabs, especially without clear evidence they are needed, would only exacerbate the already glaringly unequal vaccine access around the globe.

"As we head into whatever the Omicron situation is going to be, there is a risk that the global supply is again going to revert to high-income countries hoarding vaccine to protect (their populations)... in a sense in excess," WHO vaccines chief Kate O'Brien told reporters. Her comment came after preliminary results published Wednesday indicated that three doses of the Pfizer-BioNTech Covid vaccine were needed to obtain the same level of protection against Omicron as two doses provided against the initial strain. O'Brien said the WHO was examining the data, and that it may turn out that "additional doses have benefit to provide added protection against Omicron", but stressed it was still "very early days". While there was still little evidence that additional doses were needed to protect against developing severe Covid disease, many vulnerable people and health workers in poorer nations have yet to receive a single dose and remain at great risk.

O'Brien pointed out that the world had only just begun addressing the dangerous inequity in vaccine access in the past two months, with more donated doses and large shipments going to underserved countries. "We have to make sure that it continues," she said, warning that efforts by wealthy countries to stockpile more jabs for their people would only prolong the pandemic. "It's not going to work from an epidemiologic perspective, and it's not going to work from a transmission perspective, unless we actually have vaccine going to all countries," she said. "Where transmission continues... is where the variants are going to come from," she warned, urging "a much more rational global perspective from countries about what's actually going to shut down this pandemic." (Source: NDTV)

Choosing Vaccine for Teens, Booster for Elderly, Gap to Last Dose: Meets Lined Up to Decide by Dec 30



People wearing protective face masks wait to receive a dose of Covishield at a vaccination centre in New Delhi. More than five crucial meetings are lined up in the next three days as the central government gears up to launch vaccination drive for teenagers and booster doses for the elderly, News18.com has learnt.

The country's two top panels on Covid-19 vaccination — the National Technical Advisory Group on Immunization (NTAGI) and the National Expert Group on Vaccine Administration for Covid-19 (NEGVAC) — are expected to meet and conduct meetings separately to streamline the execution of the drive. Top bureaucrats of the Health Ministry will conduct another set of meetings on recommendations that will be submitted by the committees. "Followed by the panels' meet and then their meeting with the Health Ministry, we are likely to conduct one or two meetings with the Prime Minister's Office as the drive is closely monitored by them," a senior official at the Health Ministry told News18.com.

The panels will be taking crucial decisions like which vaccine will be used as booster dose and what will be the ideal gap between the last dose and the precautionary dose for the elderly population. "For children, Covaxin and Zydus Cadila both have been approved. Till now, the understanding is we will be using both. However, we need to look at the stock of both vaccines available to decide the final strategies. The officer further explained that the decisions need to streamline the vaccination process for children and elderly without hindering the ongoing process for first and second dose administration.

"There must be enough Covaxin for those who are due for a second dose or come for the first dose before we divert its manufacturing towards children. Similarly, we must have enough ZyCoVd doses in hand before we announce its utilisation." Another officer in the Health Ministry explained that the studies have globally shown that it is always better to have a booster dose different from the one that was primarily administered.

"We have options in hand, including SII's Covovax and Sputnik V Light. Corbevax may also be available soon for boosters apart from Covishield and Covaxin to be used as boosters. All these important decisions will be taken by the December 30 in all probability. This is the reason why urgent meetings of all scientific panels have been called," he said.

In a surprise address on Christmas, Prime Minister Narendra Modi announced that India would start giving the third "precautionary dose" to healthcare and frontline workers and those above 60 with comorbidities from January 10. He also announced vaccination for children aged 15-18 from January 3. (Source: News18)

Covid-19: Can Alcohol, Cooking Oil Tempt Unvaccinated Indians?



After a slow start, India's Covid-19 vaccination drive has hit some promising milestones over the past few months. Though the programme will miss its first, over-ambitious deadline of universal adult vaccination by 31 December, more than 85% of eligible Indians have been partially vaccinated till now. Over 55% have received both jabs.

But that still leaves millions - including many who are more vulnerable due to their age - at risk, especially with the new Omicron variant fuelling fears. To draw people to vaccination centres, some Indian states have been offering unusual incentives. In the western state of Gujarat, a municipal corporation offered a litre of cooking oil to vaccine takers and found that it worked well, especially among the less well-off. In the capital, Delhi, having vaccinated parents could boost a child's chance to get into a good pre-school, a notoriously difficult task. Nudges like these aren't new in India, where millions are dependent on state welfare programmes, administered by a vast bureaucracy. But even then, one announcement stood out.

On 23 November, a local official in the central state of Madhya Pradesh announced a 10% discount on alcohol for people who had received both vaccine doses. A day later, the order was withdrawn after a lawmaker from the governing Bharatiya Janata Party pointed out it could encourage alcohol consumption. The district official's attempt, says epidemiologist Chandrakant Lahariya, was a "perverse incentive" - one that would probably achieve its short-term objective, but at an unintended cost.

But it also underlines the challenge before India's government as it attempts to achieve universal adult vaccination. The supply bottlenecks that slowed down the drive in the initial months seem to have been fixed, agree experts. But they say it's hard to pinpoint just one reason for millions still remaining unvaccinated. "Having a vaccine supply pipeline does not automatically translate to universal access. Many people may have to travel long distances or give up wages for half a day to get the jab," says Dr Lahariya. It's essential, he adds, for the government to do a granular analysis. "There isn't enough data available in the public domain to analyse what's stopping people. The government should identify pockets of low coverage and map it against the national census," he says. Another reason could be a sense of complacency after getting one vaccine dose or having contracted Covid-19.

The supply issue hobbling vaccination has been fixed. In November, Health Minister Mansukh Mandaviya had said that more than 120 million people who got the first shot were yet to turn up for the second. Infection counts have also been low - India has reported cases around or below 10,000 every day for more than a month now. And vaccine hesitancy could be playing a role too - some Indians have said they think the vaccine is more dangerous than the virus. For health economist Dr Rijo M John, a major worry is the number of vulnerable adults who may be at risk if cases begin rising again. Almost 40% of people above 45 years - around 140 million - are yet to get either one or both doses of the vaccine. "The onus is on the government to find out why and, if needed, take the vaccine to their doorstep," he says. But can incentives help? It's hard to say. Many countries have tried to nudge people into turning up for vaccines.

In Russia, some companies tried convincing vaccine-doubters by raffling snowmobiles and cars. Thousands of people in Hong Kong rushed to get vaccinated after a slew of incentives, including chances to win expensive apartments, gold bars and Tesla cars, were announced. In the United States, some local governments offered gift cards or ran lotteries to encourage vaccination. But a National Bureau of Economic Research working paper, based on a study conducted in a California county, said that incentives didn't increase vaccination rates. "Reaching a goal of very high vaccination rates likely requires much stronger policy levers, such as employer rules or government mandates," wrote the authors. Other researchers found no evidence that a lottery system set up by Ohio state to pay randomly selected vaccine recipients up to \$1 million had worked.

study that surveyed respondents in Germany had a nuanced conclusion: that vaccinations could be increased if the government either granted liberties not available to the unvaccinated or provided "sizeable" financial rewards or ensured local doctors could give jabs. However, it also added that these incentives had "limited" scope for altering people's behaviour, and said that they may work better in the initial stages of vaccine rollout. Dr John says that for less vulnerable age groups, disincentives - such as delaying some benefits or making unvaccinated people wait longer in queues - may be a better option than incentives. "Once you start offering monetary incentives, it opens up opportunities for malpractice.

It would be better to create a situation where people feel taking the vaccine is in their own interests," he says. Countries such as Germany and Austria have begun cracking down on unvaccinated people, tightening restrictions on them and banning them from bars and restaurants. Last month, New York City put thousands of unvaccinated municipal workers on unpaid leave as a new mandate came into effect. It's also planning to make vaccination compulsory for on-site employees at all private businesses. While the carrot-and-stick approach may work in some places in the short term, Dr Lahariya says it would be better for India to look for lessons from its past successes, especially the polio vaccination programme. India was declared polio-free in 2014 after years of grassroots work, which included removing structural barriers to vaccination and increasing vaccine confidence. "It's essential to have better engagement at the community level to make sure the Covid-19 vaccination programme is successful in the long term," says Dr Lahariya. (Source: BBC)