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THE HINDU

Tuberculosis deaths up in pandemic: WHO

NEW DELHI:, OCTOBER 15, 2021 12:54 IST

In this file photo, a tuberculosis patient sits on a bed at a TB hospital in Gauhati, India. The number of people killed by tuberculosis has risen for the first time in more than a decade, largely because fewer people got tested and treated as resources were diverted to fight the coronavirus pandemic, the World Health Organization said in a report released, October 14, 2021 | Photo Credit: AP

India is on the list of countries that contributed most to the global reduction in TB notifications between 2019 and 2020.

The COVID-19 pandemic has reversed years of global progress in tackling tuberculosis and for the first time in over a decade, TB deaths have increased, according to the 2021 Global TB report released recently by the World Health Organization (WHO).

Indonesia (14%), the Philippines (12%), China (8%) and 12 other countries accounted for 93% of the total global drop in

THE HINDU

Mega vaccination camp on Saturday

CHENNAI, OCTOBER 18, 2021 23:52 IST

'More than 30 lakh people will get jabs'

Tamil Nadu will hold a mega COVID-19 vaccination camp at 50,000 centres on Saturday, and over 30 lakh people are expected to be inoculated, Health Minister Ma. Subramanian said on Monday.

Unlike the mega camps in the past that were held on Sundays, the sixth camp would be held on Saturday, he said after opening a mobile service at the Government Dental Hospital and College. The aim, he said, was to ensure better public response. People tended to avoid vaccination on Sundays under the misconception that getting inoculated after consuming alcohol and non-vegetarian food would affect their health. As on date, Tamil Nadu had 53,64,679 doses, which would be administered from Tuesday to Friday. Mr. Subramanian said that at the fifth camp, 11 lakh persons received their second dose and at the fourth, 10 lakh persons got their second dose. At the sixth camp, 30,42,509 persons were expected to be vaccinated. So far, 67% eligible persons had received their first dose and 25% their second dose, he said.

notifications.

The WHO estimated that some 4.1 million people currently suffer from TB but had not been diagnosed with the disease or had not officially reported to authorities. This figure is up from 2.9 million in 2019.

The organisation added that there was also a reduction in provision of TB preventive treatment.

"Some 2.8 million people accessed this in 2020, a 21% reduction since 2019. In addition, the number of people treated for drug-resistant TB fell by 15%, from 1,77,000 in 2019 to 1,50,000 in 2020, equivalent to only about 1 in 3 of those in need,'' it said.

In 2020, more people died from TB, with far fewer people being diagnosed and treated or provided with TB preventive treatment compared with 2019, and overall spending on essential TB services falling, it added.

It explained that the first challenge was disruption in access to TB services and a reduction in resources. In many countries, human, financial and other resources had been reallocated from tackling TB to the COVID-19 response, limiting the availability of essential services. The second was that people had struggled to seek care in the context of lockdowns.

"This report confirms our fears that the disruption of essential health services due to the pandemic could start to unravel years of progress against tuberculosis," said WHO director-general Tedros Adhanom Ghebreyesus. "This is alarming news that must serve as a global wake-up call to the urgent need for investments and innovation to close the gaps in diagnosis, treatment and care for the millions of people affected by this ancient but preventable and treatable disease," he added in the release.

TB services are among many others disrupted by the COVID-19 pandemic in 2020, but the impact on TB has been particularly severe.

For example, approximately, 1.5 million people died from TB in 2020 (including 2,14,000 among HIV positive people).

The increase in the number of TB deaths occurred mainly in the 30 countries with the highest burden of TB. Now WHO modelling projections suggest the number of people developing TB and dying from the disease could be much higher in 2021 and 2022.

"Challenges with providing and accessing essential TB services have meant that many people with TB were not diagnosed in 2020. The number of people newly diagnosed with TB and those reported to national governments fell from 7.1 million in 2019 to 5.8 million in 2020,'' noted the WHO.

Giving details of the global investment for TB falls, the WHO said that the funding in the low- and middle-income countries that account for 98% of reported TB cases remained a challenge. Of the total funding available in 2020, 81% came from domestic sources, with the BRICS countries (Brazil, Russian Federation, India, China and South Africa) accounting for 65% of total domestic funding.

Earlier globally, the number of people falling ill with TB each year (relative to population) dropped 11% from 2015 to 2020, just over half-way to the 2020 milestone of 20%.

The Indian EXPRESS

For the first time in over a decade, number of TB deaths rises

In 2020, not only did the number of deaths due to TB increase, but fewer people with the disease were diagnosed and treated, compared to 2019, and overall spending on essential TB services also dropped.

By: Express News Service | Pune |
Updated: October 16, 2021 7:37:37 am

The Covid-19 pandemic has reversed years of global progress in tackling tuberculosis (TB) and for the first time in over a decade, the number of deaths due to the disease has increased, according to the World Health Organisation's 2021 Global TB report, released on Thursday.

In 2020, not only did the number of deaths due to TB increase, but fewer people with the disease were diagnosed and treated, compared to 2019, and overall spending on essential TB services also dropped.

TB treatment and services were among many others disrupted by the Covid-19 pandemic in 2020, but the impact on TB has been particularly severe. For example, approximately, 1.5 million people died from TB in 2020 (including 2,14,000 among HIV positive people). The increase in the number of TB deaths occurred mainly in the 30 countries with the highest burden of TB, including India.

Modelling projections by the WHO suggest that the number of people developing TB and dying from the disease could be much higher in 2021 and 2022.

Challenges with providing and accessing essential TB services have meant that many people with TB were not diagnosed in 2020. The number of people newly diagnosed with TB and those reported to national governments fell from 7.1 million in 2019 to 5.8 million in 2020.

The Indian EXPRESS

Delhi: SDMC installs oxygen plant at Nehru Nagar hospital anticipating Covid-19 third wave

This is the third PSA oxygen plant installed by the civic body this month, following the ones at Tilak Nagar Colony Hospital and Poornima Sethi Multi Speciality Hospital in Kalkaji inaugurated last week.

By: **Express News Service** | New Delhi |
October 18, 2021 10:40:34 am

Oxygen cylinders are transported to a hospital in New Delhi. (Express file photo by Prem Nath Pandey)

In preparation for a possible third Covid-19 wave, the South Delhi Municipal Corporation has installed a pressure swing adsorption (PSA) oxygen plant at Chest Clinic and TB hospital, Nehru Nagar in South Delhi.

This is the third PSA oxygen plant installed by the civic body this month, following the ones at Tilak Nagar Colony Hospital and Poornima Sethi Multi Speciality Hospital in Kalkaji inaugurated last week.

Standing committee chairperson B K Oberoi said that SDMC installed the plant in collaboration with Rotary Club and PHD family welfare foundation.

"This plant can generate oxygen at approx 350 litres per minute. It will provide oxygen to 40 bedded Covid wards and on normal days it will provide oxygen to tuberculosis and other lung-disease patients."

Chairman, central zone, Rajpal Singh said that Prime Minister Narendra Modi has taken an initiative to set up PSA oxygen plants across the country from PM Cares Fund to avoid oxygen shortage in a possible third wave of Covid-19.

THE HINDU

Vaccine campaign lags despite pile-up of stock

NEW DELHI, OCTOBER 18, 2021 22:30 IST

Daily average drops to 50 lakh doses from a peak 2.5 crore


Health Ministry said daily stocks of vaccines have exceeded 10 crore doses.

The country's vaccination campaign has slowed despite amassing record stockpiles of vaccine, Health Ministry data showed on Monday, as authorities maintain a wider-than-usual gap between doses in a strategy that has boosted coverage.

Domestic production of the AstraZeneca vaccine has more than tripled since May, when a supply shortage prompted the country to double the period between doses to between 12 and 16 weeks.

That gap, exceeding the eight to 12 weeks recommended by the World Health Organization (WHO), has allowed the government to give at least one vaccine dose to 74% of the country's more than 94 crore adults, with just 30% getting the full complement of two.

Over the past few days, daily stocks of all COVID-19 vaccines have exceeded 10 crore doses, the Health Ministry figures show.

In contrast, daily vaccinations have dropped to an average of 50 lakh doses this month and even fewer in the past week, off a daily peak of 2.5 crore last month.

The Health Ministry said it followed recommendations from a group of experts in making any changes to dosage, arrived at by weighing up "scientific and empirical" evidence.

"NTAGI is actively considering the matter of dose interval between Covishield doses," its spokesperson said, referring to the Ministry's National Technical Advisory Group onImmunisation (NTAGI).

However, vaccine supply alone should not determine the gap, said Chandrakant Lahariya, a physician and epidemiologist in New Delhi.

"There is no scientific rationale for reducing the gap," Mr. Lahariya added. "In fact, retaining this gap has the possibility of giving stronger protection and longer-lasting immunity."

A 12-week gap was more logical and scientific for vaccinations drive in the country, where some studies have shown many people already had antibodies against COVID-19 infection, Mr. Lahariya said.

THE HINDU

WHO to meet next week to consider emergency use listing of India's Covaxin

UNITED NATIONS/GENEVA:, OCTOBER 18, 2021 12:48 IST

Hyderabad-based Bharat Biotech, which has developed Covaxin, had submitted EOI to the World Health Organisation on April 19 for its vaccine.

Representational image only. | Photo Credit: Sushil Kumar Verma

The WHO's technical advisory group will meet on October 26 to consider the emergency use listing of India's Covaxin which is being used in the country's nationwide anti-COVID-19 vaccination programme, according to the global health agency's chief scientist Soumya Swaminathan.

Hyderabad-based Bharat Biotech, which has developed Covaxin had submitted EOI (Expression of Interest) to the World Health Organisation on April 19 for its vaccine.

Ms. Swaminathan, the WHO's Chief Scientist, said on Twitter on Sunday that the technical advisory group will meet on October 26 to consider the Emergency Use Listing (EUL) for Covaxin.

"@WHO has been working closely with @BharatBiotech to complete the dossier. Our goal is to have a broad portfolio of vaccines approved for emergency use and to expand access to populations everywhere," she said in the tweet.

Earlier this month, the WHO said that Bharat Biotech "has been submitting data to WHO on a rolling basis and submitted additional information at the WHO's request on September 27. The WHO experts are currently reviewing this information and if it addresses all questions raised, the WHO assessment will be finalised next week." The Geneva-based WHO said it began rolling data of the vaccine on July 6. Rolling data allows the WHO to start its review right away, as information continues to come in to accelerate the overall review process.

According to the WHO, submissions for pre-qualification or listing under the emergency use procedure are confidential.

If a product submitted for assessment is found to meet the criteria for listing, the WHO will publish the results widely.

Duration of the emergency use listing process depends on the quality of the data submitted by the vaccine manufacturer and on the data meeting the WHO's criteria, according to the agency.

The indigenously-developed Bharat Biotech's Covaxin is one of the six vaccines that have received emergency use authorisation from India's drug regulator Drugs Controller General of India (DGCI) and is being used in the nationwide anti-COVID-19 inoculation programme along with Covishield and Sputnik V.

Bharat Biotech recently said it has submitted all data pertaining to Covaxin to the WHO for the EUL and is awaiting feedback from the global health watchdog.

"#COVAXIN clinical trial data was fully compiled and available in June 2021. All Data submitted

for Emergency Use Listing (EUL) Application to World Health Organization in early July. We have responded to any clarifications sought by #WHO and are awaiting further feedback," Bharat Biotech had tweeted last month.

"We are diligently working with the WHO to obtain EUL at the earliest," the company had said on Tuesday.

India, the world's largest producer of vaccines overall, suspended exports of **COVID-19** vaccines in April to focus on inoculating its own population following a sudden spike in infections.

Last month, Union Health Minister Mansukh Mandaviya announced that India will resume the supplies abroad.

THE HINDU

Mix-and-match vaccines highly effective against COVID-19: Lancet study

LONDON, OCTOBER 18, 2021 12:19 IST

During a 2.5-month average follow-up period after the second dose, the study showed a 67 per cent lower risk of infection for the combination of AstraZeneca and Pfizer vaccine shots.

People who received a first dose of the Oxford-AstraZeneca COVID-19 vaccine followed by an mRNA vaccine shot had a lower risk of infection compared to those immunised with both doses of the AstraZeneca preventive, according to a nationwide study in Sweden.

Since the use of AstraZeneca's vector-based vaccine against COVID-19 was halted for people younger than 65 years of age due to safety concerns, all individuals in Sweden who had already received their first dose of this vaccine were recommended an mRNA vaccine as their second dose.

A Lancet study shows that the mix-and-match vaccines are highly effective against COVID-19. | Photo Credit: REUTERS

"Having received any of the approved vaccines is better compared to no vaccine, and two doses are better than one," said Peter Nordstrom, a professor at the Umea University, Sweden.

"However, our study shows a greater risk reduction for people who received an mRNA vaccine after having received a first dose of a vector-based, as compared to people having received the vector-based vaccine for both doses," Mr. Nordstrom said.

The study, published in The Lancet Regional Health - Europe journal on Monday, is based on a nationwide registry data from the Public Health Agency of Sweden, the National Board of Health and Welfare, and Statistics Sweden.

In the main analysis, about 700,000 individuals were included.

During a 2.5-month average follow-up period after the second dose, the study showed a 67 per cent lower risk of infection for the combination of AstraZeneca and Pfizer vaccine shots.

There was a 79 per cent lower risk of infection for AstraZeneca and Moderna vaccine shots,

compared to unvaccinated individuals, the researchers said.

For people having received two doses of the AstraZeneca vaccine, known as Covishield in India, the risk reduction was 50 per cent, they said.

These risk estimates were observed after accounting for differences regarding date of vaccination, age of the participants, socio-economic status, and other risk factors for COVID-19.

The researchers noted that the study estimates of effectiveness apply to the infection with the Delta variant, which was dominating the confirmed cases during the follow-up period.

"The results of the study may have implications for vaccination strategies in different countries," said Marcel Ballin, doctoral student at the Umea University, and co-author of the study.

"The World Health Organization has stated that despite the promising results from previous studies regarding immune response from mix-and-match vaccination, there is a need for larger studies to investigate their safety and effectiveness against clinical outcomes. Here we now have one such study," Mr. Ballin said.

There was a very low incidence of adverse thromboembolic events, or formation of blood clots in blood vessels, for all vaccine schedules, according to the researchers.

The number of COVID-19 cases severe enough to result in inpatient hospitalisation was too low for the researchers to be able to calculate the effectiveness against this outcome.

Past studies have demonstrated that mix-and-match vaccine schedules generate a robust immune response.

However, it has been unclear to which extent these schedules may reduce the risk of clinical infection, the researchers said, adding that their study aimed to fill that knowledge gap.

THE HINDU

Excessive screen time delays development, says study

CHENNAI, OCTOBER 18, 2021 02:34 IST

Children exposed to several hours of screen time exhibit inability to comprehend what is being told

Excessive screen time results in delay in development of language. File | Photo Credit: R. Ashok

Too much exposure to television or mobile phone screens for children below the age of five could be detrimental to their development, a study by Chennai-based researchers has found.

The study assessed the performance of the children and their understanding of commands from their mothers, and found that children who had been exposed to several hours of television or mobile phone screens exhibited an inability to comprehend what they were being told.

Samya Varadarajan, the lead author of *Prevalence of excessive screen time and its association with developmental delay in children aged <5 years: A population-based cross-*

sectional study in India, which was published recently in the journal *PLOS One,* said the study tried to understand the association between excessive screen time and developmental delay in children below five years of age.

The study was done in 2019, but Dr. Varadarajan, an assistant professor of community medicine at Sri Ramachandra University, said it could be extrapolated to the current scenario, where children are forced to rely on online clas ses during the pandemic.

THE HINDU

WHO chief discusses Covid vaccination and other issues with Health Minister Mandaviya

GENEVA:, OCTOBER 20, 2021 10:01 IST

The WHO Director-General said that he also discussed with Mr. Mandaviya vaccine equity issues

WHO chief Tedros Adhanom Ghebreyesus discussed the issue of the **emergency use listing of Bharat Biotech's COVID-19 vaccine Covaxin** and resumption of supplies of the Serum Institute of India-manufactured AstraZeneca vaccine to the COVAX facility among other topics during a telephonic conversation with Health Minister Mansukh Mandaviya.

"Had a call with @mansukhmandviya, India's Health Minister, to discuss #India's ongoing #COVID19 vaccination programme; the need for a global pandemic agreement; digital health; & traditional medicine. We welcome India's support to strengthen WHO, incl. via flexible, sustainable financing," Mr. Ghebreyesus tweeted on October 19.

The WHO Director-General said that he also discussed with Mr. Mandaviya vaccine equity issues: "the resumption of SII/AstraZeneca vaccine supplies to #COVAX; the Covaxin Emergency Use Listing process; and technology and license sharing through C-TAP." COVID-19 Technology Access Pool (C-TAP) was launched in May last year for facilitating timely, equitable and affordable access of COVID-19 health products by boosting their supply.

Mr. Mandaviya had also tweeted that he had a "detailed interaction" with the WHO chief, accompanied by other senior officials of the global health agency "on various issues related to health, including pandemic management and WHO reforms.

"DG WHO lauded the mammoth efforts undertaken by the Indian government for #COVID19 vaccination," Mr. Mandaviya tweeted.

The cumulative number of Covid vaccine doses administered in India crossed 99 crore on October 19 and as the country is close to administering 100 crore doses. According to official figures, around 74.45% of India's eligible adult population has been administered at least one dose of the Covid vaccine and around 30.63% have received both doses.

On October 18, WHO said it is expecting one additional piece of information from Bharat Biotech regarding its COVID-19 vaccine COVAXIN and emphasised that it has to thoroughly evaluate to ensure vaccines are safe and "cannot cut corners" before recommending a vaccine for emergency use.

"We are aware that many people are waiting for WHO's recommendation for Covaxin to be included in the #COVID19 Emergency Use Listing, but we cannot cut corners - before recommending a product for emergency use, we must evaluate it thoroughly to make sure it is safe

and effective," the global health organisation had said in a tweet.

"Bharat Biotech - the manufacturer of Covaxin - has been submitting data to WHO on a rolling basis and WHO experts have reviewed these data. WHO is expecting one additional piece of information from the company today," it said.

WHO said the timeframe for its Emergency Use Listing procedure is dependent on how quickly a company producing the vaccine is able to provide the data required for the WHO to evaluate the vaccine's quality, safety, efficacy and its suitability for low- and middle-income countries.

"When the information provided addresses all questions raised, WHO and the Technical Advisory Group will complete the assessment and come to a final recommendation whether to grant Emergency Use Listing to the vaccine," it said.

On October 17, World Health Organisation Chief Scientist Soumya Swaminathan had said in a tweet that the technical advisory group at the World Health Organisation will meet on October 26 to consider the Emergency Use Listing for Covaxin.

Bharat Biotech had submitted EOI (Expression of Interest) on April 19 for its vaccine. The WHO said it began rolling data of the vaccine on July 6. Rolling data allows the WHO to start its review right away, as information continues to come in, to accelerate the overall review process.

According to the WHO, submissions to the global health body for prequalification or listing under the emergency use procedure are confidential. If a product submitted for assessment is found to meet the criteria for listing, WHO will publish the results widely.

Duration of the emergency use listing process depends on the quality of the data submitted by the vaccine manufacturer and on those data meeting WHO criteria, according to the agency.

Bharat Biotech's Covaxin and AstraZeneca and Oxford University's Covishield are the two widely used vaccines in India. The Covishield vaccine, which has been developed by AstraZeneca, is manufactured in India by Pune-based Serum Institute of India.

India will resume export of surplus COVID-19 vaccines in the fourth quarter of 2021 under the **'Vaccine Maitri' programme** and to meet its commitment to the COVAX global pool.

The government had stopped export of COVID-19 vaccines after the second wave of the pandemic hit the country in April this year. India has exported over 66 million vaccine doses to nearly 100 countries through grants, commercial shipments and the COVAX facility.

THE HINDU

COVID-19 vaccine for children still away: Government

NEW DELHI , OCTOBER 17, 2021 16:52 IST

Scientific rationale and supply situation will dictate final call for approval of vaccine, says COVID Task Force chief V.K. Paul.

The government will take a final decision on vaccinating children and adolescents against coronavirus on the basis of overall scientific rationale as well as the supply situation of vaccines available for those below 18 years old, COVID Task Force chief V K Paul said on Sunday.

Mr. Paul, who has been playing a key role in the government's efforts in the fight against the coronavirus pandemic, also cautioned that even though infections are coming down and

the second wave is subsiding, it will not be fair now to say that the worst is over since many countries have seen more than two waves.

COVID-19 vaccination in progress in New Delhi. File | Photo Credit: Sushil Kumar Verma

Currently, three vaccines — Covishield, Covaxin and Sputnik V — being administered in the country are only for those above 18 years of age. All of them are two-dose vaccines. Zydus Cadila's indigenously developed needle-free COVID-19 vaccine ZyCoV-D is set to become the first vaccine that will be available in India for those in the age group of 12-18 years. It has received Emergency Use Authorisation (EUA).

"We do know that several countries have introduced vaccination for adolescents (people) and children. We will take a final decision based on the overall scientific rationale and the supply situation of the child licenced vaccines, going forward," Mr. Paul told PTI in an interview.

An expert panel of India's central drug authority has recommended granting EUA to Bharat Biotech's Covaxin for children and adolescents in the 2-18 years age group with certain conditions. If approved by the Drugs Controller General of India (DCGI), it will be the second vaccine after ZyCoV-D to get EUA for use among those below 18 years. The National Technical Advisory Group on Immunisation (NTAGI) is looking at how ZyCov-D should be positioned for most optimum use.

According to Mr. Paul, Covaxin is a part of the adult vaccination programme and how to provision the vaccine, if at all for children, has to be also examined in the totality of the requirements of the vaccination programme. "A pragmatic decision (on vaccination of children and adolescents) can be taken (only) by balancing the supply and the potential eligibility," he said.

While noting it will not be possible now to give a particular timeline on when COVID vaccination will start for children, Mr. Paul said, "The preparation for incorporation of Zydus Cadila's vaccine into the vaccination programme is proceeding well, training is already being held. NTAGI advice for the best use of the vaccine is explored. So soon, this will be rolled out". According to Paul, children are part and parcel of the chains of COVID transmission and are infected in large numbers.

At the same time, COVID infections in children are very mild or asymptomatic, and that is one side of the story. On the other side, he said that once there is enough vaccine available that can be used in children, "so why not protect them". Schools have reopened in many states, mainly for higher classes. When asked whether the worst of the pandemic is over, Paul said, "It is reassuring that the number of COVID cases are now on the decline and the second wave is now subsiding but to say that the worst is over will not be fair because we have seen in other nations, there have been more than two waves".

Cautioning that the country is passing through a phase when there are festivals and potential gatherings, he said this is a critical phase as the virus can spread again. "We have seen that even in other countries where vaccine coverage is good, the escalation in the pandemic can happen and has happened. "Therefore, certainly we should not assume that this situation of the declining trend will continue and definitely we should not think that the worst is over, we have to be ever watchful," he emphasised.

While stressing that the vaccination programme has picked up huge speed, Paul also said that states which are for whatever reasons lagging behind must work hard and must push vaccination. "Now, of course, there is no dearth, no inadequacy of vaccine supply. They are as of today 10 crore doses of vaccines with the state governments for the vaccination programme," he said.

As the supply situation is excellent, Paul said the states must ensure that they reach out to those who are left out in the vaccination programme. "Given the present generous vaccine supply situation and the performance of the vaccine implementation programme, it is well within our grasp to accomplish universal vaccination of the adult population," he asserted. On some reports that India simply will not have enough syringes for COVID vaccines if every single adult is to be fully vaccinated by the end of the year, Paul said, "there is no problem of syringe availability, we are in a good shape".

The country recorded 14,146 fresh COVID infections in a day while active cases declined to 1,95,846, the lowest in 220 days, according to the Union Health Ministry's data released on Sunday.

The Indian EXPRESS

Waiting for more data, can't cut corners to list Covaxin, says WHO

The WHO said it could not "cut corners", and that the timeframe for its Emergency Use Listing was dependent on how quickly vaccine manufacturers were able to provide the required data.

By: **Express News Service** | New Delhi, Pune | Updated: October 19, 2021 8:18:13 am

Covaxin accounts for 11% of the 985.5 million total doses administered in India, and has also been exported. (File)

The World Health Organisation (WHO) said on Monday that it was expecting "one additional piece of information" from Bharat Biotech on its Covid-19 vaccine Covaxin, which is being examined by WHO's experts for grant of Emergency Use Listing (EUL).

This additional information was expected "today", the WHO said.

In a series of tweets, the WHO said it could not "cut corners", and that the timeframe for its Emergency Use Listing was dependent on how quickly vaccine manufacturers were able to provide the required data.

"We are aware that many people are waiting for WHO's recommendation for Covaxin to be included in the #COVID19 Emergency Use Listing, but we cannot cut corners — before recommending a product for emergency use, we must evaluate it thoroughly to make sure it is safe and effective," the WHO said.

"Bharat Biotech — the manufacturer of Covaxin — has been submitting data to WHO on a rolling basis and WHO experts have reviewed these data. WHO is expecting one additional piece of information from the company today.

"The timeframe for the WHO Emergency Use Listing procedure is dependent on how quickly a

company producing the vaccine is able to provide the data required for WHO to evaluate the vaccine's quality, safety, efficacy and its suitability for low- and middle-income countries.

The WHO said that once "the information provided addresses all questions raised", the organisation and its Technical Advisory Group would "complete the assessment and come to a final recommendation whether to grant Emergency Use Listing to the vaccine".

Reached for a comment, a senior official of the Hyderabad-based Bharat Biotech told The Indian Express late on Monday evening that the WHO was following the normal review process, and the company was providing all information that was being sought.

On Sunday, WHO Chief Scientist Dr Soumya Swaminathan had posted on Twitter that the "technical advisory group will meet on Oct 26th to consider EUL for #Covaxin". She said that WHO was "working closely" with BharatBiotech "to complete the dossier".

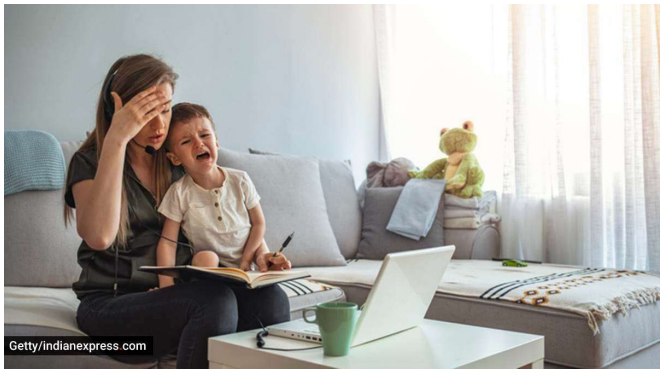
"Our goal is to have a broad portfolio of vaccines approved for emergency use & to expand access to populations everywhere," Dr Soumya said.

The Indian EXPRESS

How work-from-home has disrupted mothers' work-life balance

Work-from-home has only upended a working woman's work-life balance, affecting her physical and mental health.

By: Parenting Desk | New Delhi | October 18, 2021 7:09:09 pm



For working mothers dealing with the weight of work and home responsibilities, there have been several missed opportunities that they could not convert into possible successes. (Photo: Getty/Thinkstock)

By Yogita Tulsiani

The life of a working mother is not easy, and juggling home and work responsibilities keeps them on their toes. Despite that, many are able to manage both and excel.

The equation, however, has changed completely after the Covid-19 outbreak. The pandemic-induced lockdown has paved the way for work-from-home (WFH), which was initially touted as an ideal solution for those finding work-life balance, especially for working mothers, for they could give more time to their kids and home. It, however, became a daunting task to manage the burden of daily chores, 24×7 caregiving, and balancing professional life for a lot of working women.

Here's how WFH has impacted the lives of working women.

1. More responsibilities, more challenges: Working mothers don't just have professional responsibilities, they are also invested in caregiving. Due to the pandemic, schools have gone online and it has only made things difficult for children. Since it's tough for them to adapt to this new way of learning, they need their parents' supervision and for working women, it gets tough to simultaneously handle their own work and **assist kids with online classes**.

The workload increases as they also have to devote time to help kids with homework. This affects their work performance. It is even tougher with **toddlers who are still breastfeeding**. In such cases, women have little time to themselves.

2. Impact on physical/mental health: Work-from-home has only upended a working woman's work-life balance, affecting her physical and mental health. The strenuous efforts to keep up with work responsibilities with long hours of shifts along with caregiving duties drain her energy. The same cycle takes a toll on her mental health as well.

3. Effect on current and long-term career prospects: For working mothers dealing with the weight of work and home responsibilities, there have been several missed opportunities that they could not convert into possible successes. The long hours of work coupled with home duties have only made things tough for women aiming for bigger roles and better opportunities in their careers. They find it tough to apply for a better opportunity or look for a bigger role as handling both could become too much. The crisis is exposing new inequalities in the gender gap as working mothers deal with a greater burden.

4. Meeting deadlines in this new set-up: Remote working comes with its own set of challenges as efficiency and productivity remain a concern. Allocation of time and resources becomes a tough task for companies, and for employees, especially working mothers, it gets even tougher to adjust to the demand.

5. No time for rest: Not just work and kids, women are usually involved in most of the household work, too, in the absence of domestic help due to the pandemic. This reduces whatever time they are left with to rest or relax. It may result in an over-exhausted, stressful, and overburdened population of women.

6. A lonely way: Working women miss out on a lot of things. Due to lack of time, it gets tough to participate in social gatherings or other such events. In fact, interaction with colleagues also remains negligible so the scope for discussions, idea sharing, or casual office chats is limited. Communication is essential for every individual and remote working has taken that away.
(The writer is the MD of iXceed Solutions)

The Indian EXPRESS

Vaccines, masks? Japan puzzling over sudden virus success

Some possible factors in Japan's success include a belated but remarkably rapid vaccination campaign, an emptying out of many nightlife areas, a widespread practice of wearing masks and bad weather in August that kept people home.

By: AP | Tokyo |
October 18, 2021 3:48:33 pm

People walk through the famed Kabukicho entertainment district of Tokyo on the first night of the government's lifting of a coronavirus state of emergency. (AP)

Almost overnight, Japan has become a stunning, and somewhat mysterious, coronavirus success story.

Daily new COVID-19 cases have plummeted from a mid-August peak of nearly 6,000 in Tokyo, with caseloads in the densely populated capital now routinely below 100, an 11-month low.

The bars are packed, the trains are crowded, and the mood is celebratory, despite a general bafflement over what, exactly, is behind the sharp drop.

Japan, unlike other places in Europe and Asia, has never had anything close to a lockdown, just a series of relatively toothless states of emergency.

Some possible factors in Japan's success include a belated but remarkably rapid vaccination campaign, an emptying out of many nightlife areas as fears spread during the recent surge in cases, a widespread practice, well before the pandemic, of wearing masks and bad weather in late August that kept people home.

But with vaccine efficacy gradually waning and winter approaching, experts worry that without knowing what exactly why cases have dropped so drastically, Japan could face another wave like this summer, when hospitals overflowed with serious cases and deaths soared – though the numbers were lower than pre-vaccination levels.

Many credit the vaccination campaign, especially among younger people, for bringing infections down. Nearly 70 percent of the population is fully vaccinated. "Rapid and intensive vaccinations in Japan among those younger than 64 might have created a temporary condition similar to herd-immunity," said Dr. Kazuhiro Tateda, a Toho University professor of virology.

Tateda noted that vaccination rates surged in July to September, just as the more infectious delta variant was spreading fast. He cautioned, however, that breakthrough infections in the US, Britain and other places where inoculations began months earlier than in Japan show that vaccines alone are not perfect and efficacy gradually wears off.

Japan's vaccinations started in mid-February, with health workers and the elderly first in line.

Shortages of imported vaccines kept progress slow until late May, when the supply stabilised and daily inoculation targets were raised to above 1 million doses to maximise protection before the July 23-August 8 Olympics.

The number of daily shots rose to about 1.5 million in July, pushing vaccination rates from 15 per cent in early July to 65 per cent by early October, exceeding the 57 per cent of the United States.

Daily new cases surged just weeks ahead of the Olympics, forcing Japan to hold the Games with daily caseloads of more than 5,000 in Tokyo and around 20,000 nationwide in early August.

Tokyo reported 40 cases Sunday, below 100 for the ninth straight day and lowest this year. Nationwide, Japan reported 429 cases Sunday for an accumulated total of about 1.71 million and 18,000 deaths since the pandemic began early last year.

So why the drop?

"It's a tough question, and we have to consider the effect of the vaccinations progress, which is extremely big," said Disease Control and Prevention Centre Director Norio Ohmagari.

"At the same time, people who gather in high-risk environments, such as crowded and less-ventilated places, may have been already infected and acquired natural immunity by now."

Though some speculated that the drop in cases might be due to less testing, Tokyo metropolitan government data showed the positivity rate fell from 25 per cent in late August to 1 per cent in

mid-October, while the number of tests fell by one-third. Masataka Inokuchi, the Tokyo Medical Association deputy chief, said falling positivity rates show infections have slowed.

Japan's state of emergency measures were not lockdowns but requests that focused mainly on bars and eateries, which were asked to close early and not serve alcohol.

Many people continued to commute on crowded trains, and attended sports and cultural events at stadiums with some social distancing controls.

The emergency requests have ended and the government is gradually expanding social and economic activity while allowing athletic events and package tours on a trial basis using vaccination certificates and increased testing.

To speed up inoculations, former Prime Minister Yoshihide Suga, who left office recently, expanded the number of health workers legally eligible to give shots, opened large-scale vaccination centres and promoted workplace vaccinations beginning in late June.

Kyoto University professor Hiroshi Nishiura told a recent government advisory board meeting that he estimates vaccinations helped some 650,000 people avoid infection and saved more than 7,200 lives between March and September.

Many experts initially blamed younger people, seen drinking on the streets and in parks when the bars were closed, for spreading the virus, but said data showed many in their 40s and 50s also frequented nightlife districts. Most serious cases and deaths were among unvaccinated people in their 50s or younger.

Takaji Wakita, director of the National Institute of Infectious Diseases, told reporters recently he is worried people have already resumed partying in nightlife districts, noting that the slowing of infections may have already hit bottom. "Looking ahead, it is important to further push down the caseloads in case of a future resurgence of infections," Wakita said Thursday.

On Friday, new Prime Minister Fumio Kishida said a preparedness plan to be compiled by early November would include tougher limits on activities and require hospitals to provide more beds and staff for COVID-19 treatment in case infections soar in a "worst-case scenario". He did not elaborate on details.

Many people are cautious about letting down their guard, regardless of the numbers. "Mask-wearing has become so normal," said university student Mizuki Kawano. "I'm still worried about the virus," she said.

"I don't want to get close to those who don't wear masks," said her friend Alice Kawaguchi.

Public health experts want a comprehensive investigation into why infections have dropped off. An analysis of GPS data showed that people's movements in major downtown entertainment districts fell during the most recent, third state of emergency, which ended September 30.

"I believe the decrease of people visiting entertainment districts, along with the vaccination progress, has contributed to the decline of infections," said Atsushi Nishida, the director of the Research Centre for Social Science & Medicine Sciences at the Tokyo Metropolitan Institute of Medical Science.

But people headed back to entertainment districts as soon as the recent emergency ended, he said, and that may "affect the infection situation in coming weeks".

The Indian EXPRESS

BMC preparing for vaccine drive for children, awaiting central guidelines: Mumbai Mayor

"Vaccination will start after receiving the guidelines from the central government and the required stock of vaccines for this age group," said Kishori Pednekar.

By: **Express News Service** | Mumbai |
Updated: October 18, 2021 7:19:12 pm

Mumbai Mayor Kishori Pednekar on Monday said that the Brihanmumbai Municipal Corporation (BMC) is prepared to launch a Covid-19 vaccination drive for 33 lakh children between 2 and 17 years of age, but it is awaiting guidelines from the central government.

"Vaccination will start after receiving the guidelines from the central government and the required stock of vaccines for this age group," said Pednekar in a media interaction on Monday.

The decks were cleared for children to be included in India's Covid vaccination drive with the government's Subject Expert Committee (SEC) on October 12 recommending the grant of Emergency Use Authorisation (EUA) for Bharat Biotech's Covaxin for the age group of 2-18 years.

As schools reopened for classes 8 to 12 in the city, BMC earlier indicated that it is ready to vaccinate the city's adolescents as soon as the Indian Council of Medical Research (ICMR) permits the vaccination programme to roll out for children, and will not require any infrastructure upgrade.

Since the start of the pandemic last year, 49,743 infections were seen among children and adolescents – 13,947 below nine years of age and 35,806 between 10 and 19 years of age. A serosurvey conducted on a paediatric population of 2,176 in Mumbai in June this year had found that 51.18 per cent of children have been exposed to Covid-19, with most remaining asymptomatic.

Maximum seropositivity (53.43 per cent) was found in the 10-14 age group, for which at least 560 samples were collected. This was followed by the 15-18 age group (51.39 per cent). The seropositivity was 51.04 per cent in the 1-4-year age group and 47.33 per cent in the 5-9 age group.

Pednekar hailed the city's vaccination coverage and asked citizens to continue to follow Covid-appropriate behaviour like wearing masks.

Currently, the city has 325 vaccination centres and 97% of eligible citizens of Mumbai have received a single dose of vaccination and 55% are fully vaccinated. As per the BMC data, 1.34 crore people have been administered at least one dose of the vaccine while 48.33 lakh are fully vaccinated with both doses.

The Indian EXPRESS

US will accept mixed doses of vaccines from international travelers

The White House said Friday the new vaccine requirements for foreign nationals traveling to the United States will begin Nov. 8 for visitors crossing at land borders as well as international air travelers.

By: **Reuters** | Washington |
October 16, 2021 9:17:05 am

The CDC said the vaccines approved by the Food and Drug Administration (FDA) for use, as well as those authorized by the WHO, will be accepted for entry into the United States, including the AstraZeneca vaccine. (AP Photo)

The U.S. Centers for Disease Control and Prevention (CDC) said late on Friday that it will accept mixed-dose coronavirus vaccines from international travelers, a boost to travelers from Canada and other places.

The CDC said last week that it would accept any vaccine authorized for use by U.S. regulators or the World Health Organization. "While CDC has not recommended mixing types of vaccine in a primary series, we recognize that this is increasingly common in other countries so should be accepted for the interpretation of vaccine records," a CDC spokeswoman said.

The White House said Friday the new vaccine requirements for foreign nationals traveling to the United States will begin Nov. 8 for visitors crossing at land borders as well as international air travelers.

Representative Brian Higgins, a New York Democrat representing a district along the Canadian border, had on Friday asked the CDC if it would accept the mixed vaccine doses noting "nearly four million Canadians, equivalent to 10% of their fully vaccinated population, have received mixed doses of the available mRNA COVID-19 vaccines – this includes the AstraZeneca vaccine."

The CDC said the vaccines approved by the Food and Drug Administration (FDA) for use, as well as those authorized by the WHO, will be accepted for entry into the United States, including the AstraZeneca vaccine.

The CDC said "individuals who have any combination of two doses of an FDA approved/authorized or WHO emergency use listed COVID-19 two dose series are considered fully vaccinated."

The CDC plans to answer other questions and release a contact tracing order for international air visitors by Oct. 25.

The Indian EXPRESS

Second J&J COVID-19 shot gets expert backing; FDA is looking at lowering age for Pfizer booster

"There is a public health imperative. What we're seeing is this is a group with overall lower efficacy than we have seen with the mRNA vaccine, and so there is some urgency to do something," said Dr. Arnold Monto, an epidemiologist at the University of Michigan's School of Public Health who chaired the meeting.

By: **Reuters** |
October 16, 2021 8:40:25 am.

Outside advisers to the U.S. Food and Drug Administration on Friday unanimously recommended the agency authorize a second shot of Johnson & Johnson's COVID-19 vaccine for all recipients of the one-dose inoculation.

The J&J single dose vaccine is the fifth to be included in India's nationwide inoculation drive.

After hearing presentations from J&J and FDA scientists, many members of the advisory panel asked if J&J's single-dose vaccine should actually be considered a two-dose shot for everyone. They pointed to the lower levels of virus neutralizing antibodies it provokes compared to vaccines using messenger RNA (mRNA) technology from Moderna Inc and Pfizer/BioNTech.

"There is a public health imperative. What we're seeing is this is a group with overall lower efficacy than we have seen with the mRNA vaccine, and so there is some urgency to do something," said Dr. Arnold Monto, an epidemiologist at the University of Michigan's School of Public Health who chaired the meeting.

The FDA authorized boosters of the Pfizer/BioNTech vaccine last month for Americans aged 65 and older and those at high risk of severe illness or occupational exposure to the virus. Marks, director of the FDA's Center for Biologics Evaluation and Research, said data from Israel, where Pfizer booster shots have already been administered broadly, suggests that the vaccine's efficacy is waning and makes a compelling case for lowering the age for receiving booster shots to 40.Concerns about rare cases of heart inflammation in younger men who receive the Pfizer/BioNTech vaccine also made 40 a good cutoff point for the additional shots, Marks said.

CONCERNS OVER J&J DATA

Marks raised concerns that the data presented by J&J did not reflect all of the information on the vaccine's performance. "There are some real challenges here. All of the data do not fully align with this being a vaccine that retains excellent activity over time, against all forms of disease or even against severe forms of disease," Marks said.

J&J scientists said their vaccine was more durable than the mRNA vaccines. "If the vaccine isn't adequate, it should be boosted and everybody should get it," said Dr. Eric Rubin, an infectious disease expert at the Harvard Chan School of Public Health.

After the vote, Rubin said he expects that getting the second J&J dose later than two months after the first should be safe. While the data are scarce, he said, "there isn't much to suspect that it's wrong," adding, "I certainly am supportive of those individuals getting another dose.

"Once the FDA signs off on the second dose, the U.S. Centers for Disease Control and Prevention will make specific recommendations on who should get the shots. CDC advisers are scheduled to meet to discuss the boosters next week.

On Thursday, the panel unanimously backed booster shots of Moderna's COVID-19 vaccine for Americans aged 65 and older and those at high risk of severe illness or occupational exposure to the virus.

U.S. health officials have been under pressure to authorize the additional shots after the White House announced plans in August for a widespread booster campaign pending approvals from the FDA and the CDC.

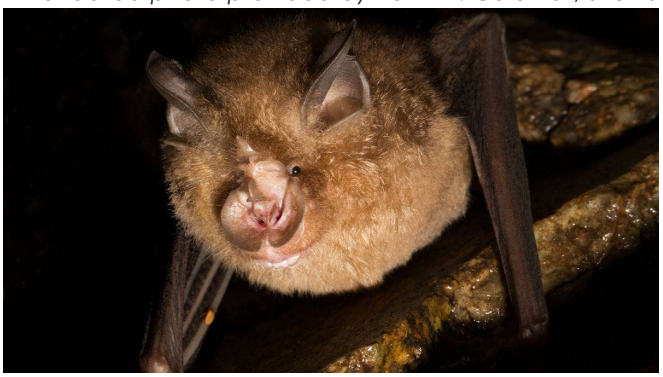
The Indian EXPRESS

Newly discovered bat viruses give hints to COVID's origins

These bat viruses, along with more than a dozen others discovered in recent months in Laos, Cambodia, China and Thailand, may also help researchers better anticipate future pandemics.

By: New York Times |
October 15, 2021 11:01:40 am

An undated photo provided by Kevin K. Caldwell, shows



a least horseshoe bat, Rhinolophus pusillus, one of three species of horseshoe bat observed in a recent study. (Kevin K. Caldwell via The New York Times)

Written by Carl Zimmer

In the summer of 2020, half a year into the coronavirus pandemic, scientists travelled into the forests of northern Laos to catch bats that might harbor close cousins of the pathogen.

In the dead of night, they used mist nets and canvas traps to snag the animals as they emerged from nearby caves, gathered samples of saliva, urine and feces, then released them back into the darkness.

The fecal samples turned out to contain coronaviruses, which the scientists studied in high-security biosafety labs, known as BSL-3, using specialised protective gear and air filters.

Three of the Laos coronaviruses were unusual: They carried a molecular hook on their surface that was very similar to the hook on the virus that causes COVID-19, called SARS-CoV-2. Like SARS-CoV-2, their hook allowed them to latch onto human cells.

"It is even better than early strains of SARS-CoV-2," said Marc Eloit, a virus expert at the Pasteur Institute in Paris who led the study, referring to how well the hook on the Laos coronaviruses binds to human cells. The study was posted online last month and has not yet been published in a scientific journal.

Virus experts are buzzing about the discovery. Some suspect that these SARS-CoV-2-like viruses may already be infecting people from time to time, causing only mild and limited outbreaks. But under the right circumstances, the pathogens could give rise to a COVID-19-like pandemic, they say.

The findings also have significant implications for the charged debate over COVID's origins, experts say. Some people have speculated that SARS-CoV-2's impressive ability to infect human cells could not have evolved through a natural spillover from an animal. But the new findings seem to suggest otherwise.

"That really puts to bed any notion that this virus had to have been concocted or somehow manipulated in a lab to be so good at infecting humans," said Michael Worobey, a University of Arizona virus expert who was not involved in the work.

These bat viruses, along with more than a dozen others discovered in recent months in Laos, Cambodia, China and Thailand, may also help researchers better anticipate future pandemics. The viruses' family trees offer hints about where potentially dangerous strains are lurking and which animals scientists should look at to find them.

Last week, the U.S. government announced a $125 million project to identify thousands of wild viruses in Asia, Latin America and Africa to determine their risk of spillover. Eloit predicted that there were many more relatives of SARS-CoV-2 left to find. "I am a fly fisherman," he said. "When I am unable to catch a trout, that doesn't mean there are no trout in the river."

When SARS-CoV-2 first came to light, its closest known relative was a bat coronavirus that Chinese researchers found in 2016 in a mine in southern China's Yunnan province. RaTG13, as it is known, shares 96% of its genome with SARS-CoV-2. Based on the mutations carried by each virus, scientists have estimated that RaTG13 and SARS-CoV-2 share a common ancestor that infected bats about 40 years ago.

Both viruses infect cells by using a molecular hook, called the "receptor-binding domain," to latch onto their surface. RaTG13's hook, adapted for attaching to bat cells, can only cling weakly to human cells. SARS-CoV-2's hook, by contrast, can clasp cells in the human airway, the first step toward a potentially lethal case of COVID-19.

To find other close relatives of SARS-CoV-2, wildlife virus experts checked their freezers full of old samples from across the world. They identified several similar coronaviruses from southern China, Cambodia and Thailand. Most came from bats, while a few came from scaly mammals known as pangolins. None was a closer relative than RaTG13.

Eloit and his colleagues instead set out to find new coronaviruses.

They traveled to northern Laos, about 150 miles from the mine where Chinese researchers had found RaTG13. Over six months they caught 645 bats belonging to 45 different species. The bats harbored two dozen kinds of coronaviruses, three of which were strikingly similar to SARS-CoV-2 — especially in the receptor-binding domain.

In RaTG13, 11 of the 17 key building blocks of the domain are identical to those of SARS-CoV-2. But in the three viruses from Laos, as many as 16 were identical — the closest match to date.

Eloit speculated that one or more of the coronaviruses might be able to infect humans and cause mild disease. In a separate study, he and colleagues took blood samples from people in Laos who collect bat guano for a living. Although the Laotians did not show signs of having been infected with SARS-CoV-2, they carried immune markers, called antibodies, that appeared to be caused by a similar virus.

Linfa Wang, a molecular virus expert at the Duke-NUS Medical School in Singapore who was not involved in the study, agreed that such an infection was possible, since the newly discovered viruses can attach tightly to a protein on human cells called ACE2.

"If the receptor-binding domain is ready to use ACE2, these guys are dangerous," Wang said.

Genetic patchwork

Paradoxically, some other genes in the three Laotian viruses are more distantly related to SARS-CoV-2 than other bat viruses. The cause of this genetic patchwork is the complex evolution of coronaviruses.

If a bat infected with one coronavirus catches a second one, the two different viruses may end up in a single cell at once. As that cell begins to replicate each of those viruses, their genes get shuffled together, producing new virus hybrids.

In the Laotian coronaviruses, this gene shuffling has given them a receptor-binding domain that is very similar to that of SARS-CoV-2. The original genetic swap took place about a decade ago, according to a preliminary analysis by Spyros

Lytras, a graduate student at the University of Glasgow in Scotland.

Lytras and his colleagues are now comparing SARS-CoV-2 not just to the new viruses from Laos, but to other close relatives that have been found in recent months. They are finding even more evidence of gene shuffling. This process — known as recombination — may be reshaping the viruses from year to year.

"It's becoming more and more obvious how important recombination is," Lytras said.

He and his colleagues are now drawing the messy evolutionary trees of SARS-CoV-2-like viruses based on these new insights. Finding more viruses could help clear up the picture. But scientists are divided as to where to look for them.

Eloit believes the best bet is a zone of Southeast Asia that includes the site where his colleagues found their coronaviruses, as well as the nearby mine in Yunnan where RaTG13 was found.

"I think the main landscape corresponds to north Vietnam, north Laos and south China," Eloit said.

The U.S. government's new virus-hunting project, called DEEP VZN, may turn up one or more SARS-CoV-2-like viruses in that region. A spokesperson for USAID, the agency funding the effort, named Vietnam as one of the countries where researchers will be searching and said that new coronaviruses are one of their top priorities.

Colin Carlson, a biologist at Georgetown University, suspects that a virus capable of producing a COVID-like outbreak might be lurking even farther away. Bats as far east as Indonesia and as far west as India, he noted, share many biological features with the animals known to carry SARS-CoV-2-like viruses.

"This is not just a Southeast Asia problem," Carlson said. "These viruses are diverse, and they are more cosmopolitan than we have thought."

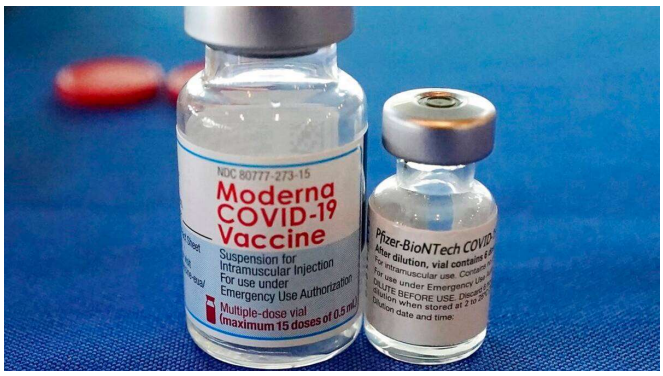
This article originally appeared in *The New York Times*.

The Indian EXPRESS

FDA panel endorses lower-dose Moderna COVID shot for booster

Many people who got their initial Pfizer shots at least six months ago are already getting a booster after the FDA authorised their use last month.

By: **AP** | Washington |
October 15, 2021 10:26:24 am



This photo shows vials of the Moderna and Pfizer Covid-19 vaccines. (Photo: AP)

US health advisers said Thursday that some Americans who received Moderna's COVID-19 vaccine should get a half-dose booster to bolster protection against the virus.

The panel of advisers to the Food and Drug Administration voted unanimously to recommend a booster shot for seniors, adults with other health problems, jobs or living situations that put them at increased risk for COVID-19.

The recommendation is non-binding but it's a key step toward expanding the US booster campaign to millions more Americans.

Many people who got their initial Pfizer shots at least six months ago are already getting a booster after the FDA authorised their use last month.

As for the dose, initial Moderna vaccination consists of two 100-microgram shots. But Moderna says a single 50-microgram shot should be enough for a booster.

The agency convened its experts Thursday and Friday to weigh-in on who should get boosters and when for people that received the Moderna and Johnson & Johnson shots earlier this year.

The FDA will use its advisers' recommendations in making final decisions for boosters from both companies. Assuming a positive decision, there's still another hurdle: Next week, a panel convened by the Centers for Disease Control and Prevention will offer more specifics on who should get one.

The Indian EXPRESS

Explained: Closing in on 100 crore shots

While India is one of only two countries with a billion-plus population, the landmark comes in the face of several hurdles. A look at how the vaccination drive has progressed since January, and the challenges still ahead.

Written by **Amitabh Sinha** | Pune |
Updated: October 19, 2021 8:12:04 am

In a couple of days or so from now, the number of Covid-19 vaccine doses administered in India will have crossed 100 crore, or 1 billion. Already, India has administered more vaccine doses than any other country in the world apart from China. With no other country having a population of anything close to 500 million, the billion-doses club would consist of only these two countries.

Getting a jab at a free vaccination camp organised by the Delhi government, on Sunday. (Express photo by Prem Nath Pandey)

Still, for a country that faced huge supply bottlenecks, and a fair amount of vaccine hesitancy, at least in the initial period, reaching the 100-crore milestone is a no small achievement. Transportation, distribution and storage of vaccines at specific low temperatures posed huge additional hurdles in a country lacking in an elaborate cold-chain network. Add to this the fact that for more than three months during this period, India was in the midst of the worst phase of the pandemic, anywhere in the world, one that had crippled the very same health system that was supposed to administer vaccines as well.

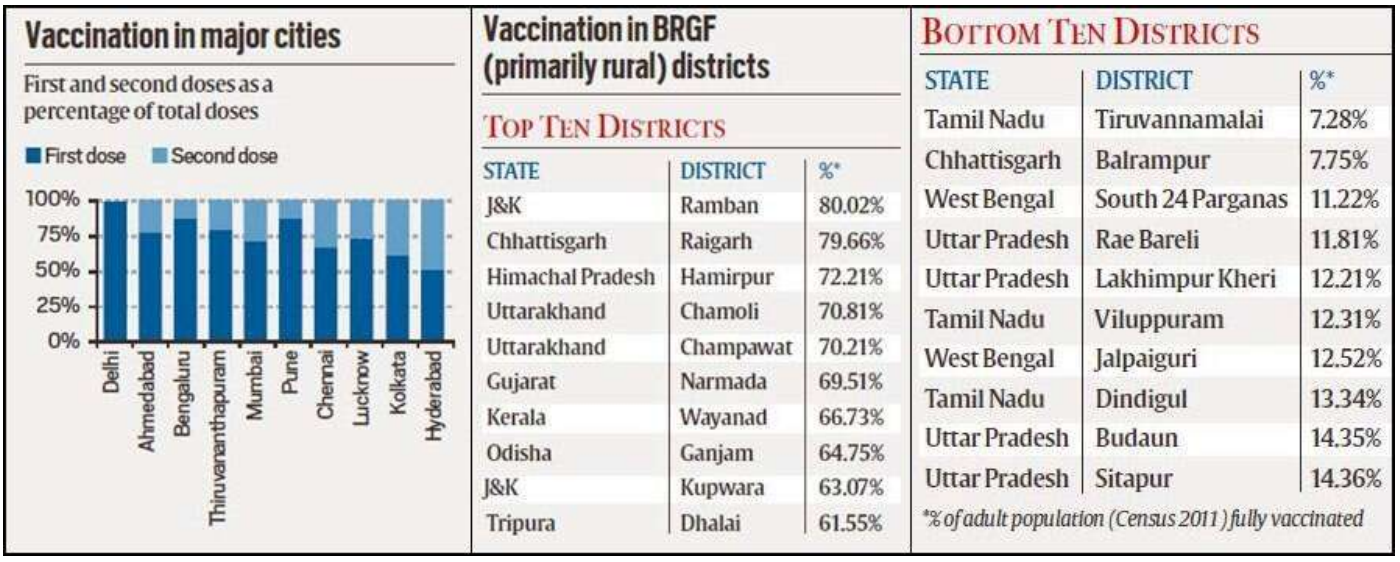
The 100-crore milestone is being achieved in about 275 days — the first vaccine doses were administered on January 16 — which means that, on an average, 27 lakh doses have been given every day through this ten-month period. There have, of course, been wide variations in the daily number of doses administered. On six days, more than 1 crore doses were administered, with a record of 2.18 crore being achieved on September 17. On the other hand, in the initial few days in January and a couple of

days in February, less than 50,000 doses were administered.

As on October 16, more than 97.65 crore vaccine doses have been administered to over 69.47 crore people. More than 28.18 crore people are fully vaccinated now. This means that 74%, or close to three-fourths, of the adult population in India have received at least one dose, while 30% have got both doses.

hand, some low-population northeastern states — Manipur, Meghalaya and Nagaland – and also Puducherry are lagging behind, with less than 60% of their people having beem vaccinated with even a single dose.

Among the higher-population states, Bihar, Uttar Pradesh, Maharashtra, West Bengal, Jharkhand, and Tamil Nadu have all achieved less than 70% coverage for first dose. Between 17% and 25% of their population have received the second dose



Vaccination in BRGF (primarily rural) districts

Top Ten Districts

STATE	DISTRICT	%*
J&K	Ramban	80.02%
Chhattisgarh	Raigarh	79.66%
Himachal Pradesh	Hamirpur	72.21%
Uttarakhand	Chamoli	70.81%
Uttarakhand	Champawat	70.21%
Gujarat	Narmada	69.51%
Kerala	Wayanad	66.73%
Odisha	Ganjam	64.75%
J&K	Kupwara	63.07%
Tripura	Dhalai	61.55%

Bottom Ten Districts

STATE	DISTRICT	%*
Tamil Nadu	Tiruvannamalai	7.28%
Chhattisgarh	Balrampur	7.75%
West Bengal	South 24 Parganas	11.22%
Uttar Pradesh	Rae Bareli	11.81%
Uttar Pradesh	Lakhimpur Kheri	12.21%
Tamil Nadu	Viluppuram	12.31%
West Bengal	Jalpaiguri	12.52%
Tamil Nadu	Dindigul	13.34%
Uttar Pradesh	Budaun	14.35%
Uttar Pradesh	Sitapur	14.36%

% of adult population (Census 2011) fully vaccinated

Smaller states, better coverage

Not surprisingly, states with smaller populations have a much better coverage of coverage of Covid-19 vaccination. In states such as Sikkim, Himachal Pradesh, Goa, and in the Union Territories of Jammu and Kashmir, Ladakh, Chandigarh, and Lakshadweep, almost every individual above the age of 18 has already received at least one dose of vaccine. These states also have the highest proportion of fully-vaccinated people — over 40% each in the case of Lakshadweep, Sikkim and Ladakh.

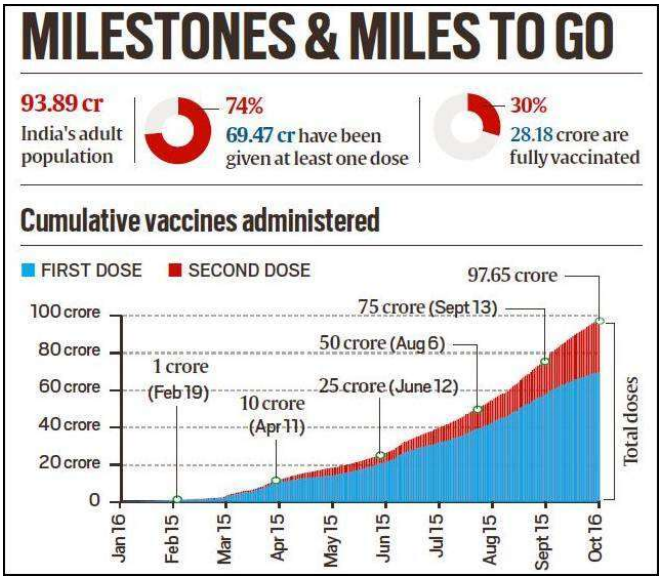
But some of the larger states, with much larger populations, such as Gujarat, Kerala, Delhi, Madhya Pradesh and Uttarakhand have also managed to vaccinate over 90% of their adult population with at least one dose. On the other

No urban-rural divide

Most of the large urban centres, including the metropolitan cities, have registered fairly good coverage of vaccines. The requirement to get vaccinated in order to attend work or to travel, or even shop, coupled with relatively lower vaccine hesitancy, could have played a role in a large number of people getting the shots. In most major cities, the proportion of people who have received both doses is fairly uniform and, in general, higher than the national average of 30% (see chart, Vaccination in major cities).

In the rural areas, the situation is slightly different. Data exclusively from the rural areas are not available, but numbers from the 243 BRGF (Backward Region Grant Fund) districts, which are primarily rural, present a fairly

comprehensive picture. A huge variation in vaccine coverage is visible in these districts. The proportion of fully vaccinated people (out of the adult population as per Census 2011) ranges from less than 8% in districts such as Tiruvannamalai in Tamil Nadu or Balrampur in Chhattisgarh, to close to 80% in Ramban in Jammu and Kashmir, and Raigarh in Chhattisgarh. In reality, these percentages would be slightly lower, because of the increase in population in the last 10 years.

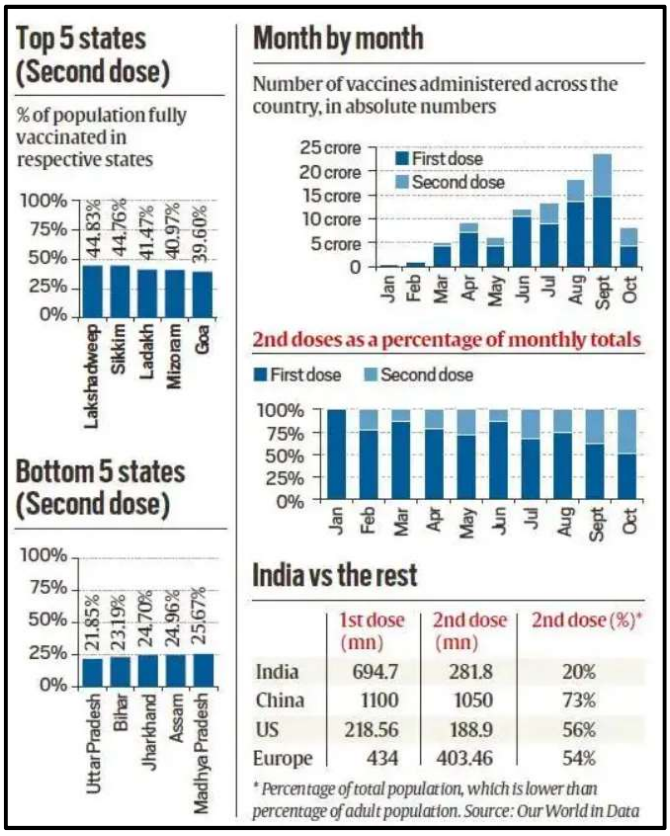


However, there is no evidence to suggest that rural areas, in general, are lagging behind in vaccinations. In fact, data show that these 243 BRGF districts have, on an average, provided over 80% of their populations (Census 2011) with at least one dose of the vaccine, much higher than the national average. The coverage of the second dose is about 30%, at par with national average. There does not seem to be a sharp urban-rural divide in terms of vaccination coverage. Again, the increase in population in the last 10 years would probably bring down these percentages by a few points.

The road ahead

Despite the phenomenal work in speeding up vaccination in the last two months, there is still a steep climb ahead. India is aiming to fully vaccinate its entire adult population by the end of this year. That means an additional 90 crore doses have to be administered between now and December 31. That is about the same amount of work, as accomplished till now, but in one-fourth of the time.

In September, India administered over 23.5 crore vaccine doses, the highest for any month. It would have to do significantly better than that



to achieve full vaccination by the end of the year. Compared to September, the rate of vaccination has been slower in October. With more than half the month gone, only about 8.21 crore doses have been administered.

But for the first time, people getting their second doses are likely to constitute about half the number this month. So far, 48% of the vaccine doses have gone to people getting their second dose. This proportion has not grown steadily, as would be expected. It dropped sharply in June

following the increase in the prescribed gap period between the two doses. After a big jump in July, it declined in August again. After that it has been on the rise, as people with the first dose crossed the halfway mark. In fact, in the last four days, second doses have been vastly outnumbering the first dose.

Vaccination may have already played a key role in limiting the spread of the disease. India's daily count of cases had dropped from a peak of over 4 lakh to 50,000 within 45 days between May and June. However, for the next three months, it remained within a range of 25,000-50,000. It is only now, in October, that this number has finally begun to slide down rapidly. For ten days now, the daily case count has not touched 20,000.

Part of the reason is the vaccination coverage reaching a critical stage. As experts repeatedly point out, vaccination does not offer guaranteed protection against infection, but it does reduce the chances. More significantly, however, it does seem to prevent the disease from taking a serious turn.

The Indian EXPRESS

An extra shot? Where things stand on boosters for three vaccines in the US

Third doses of the Pfizer-BioNTech and Moderna vaccines also have been authorized for some people with weaker immune systems, who may not have gotten full protection from the original two doses.

By: New York Times |
October 17, 2021 9:59:04 am

It can be hard to keep track of developments on coronavirus vaccine boosters without a score card.

All three vaccines initially provide very strong protection against infection, serious illness and death from Covid-19. (AP)

The Food and Drug Administration's panel of expert advisers voted Thursday to recommend booster shots for many recipients of the Moderna coronavirus vaccine, and on Friday to recommend boosters for recipients of Johnson & Johnson's vaccine who are ages 18 and older, at least two months after receiving the first dose.

The agency has already authorized booster shots of the other vaccine in use in the United States, from Pfizer-BioNTech, for certain groups who got that vaccine initially. Third doses of the Pfizer-BioNTech and Moderna vaccines also have been authorized for some people with weaker immune systems, who may not have gotten full protection from the original two doses.

All three vaccines initially provide very strong protection against infection, serious illness and death from Covid-19. The impetus for boosters comes from studies suggesting that while that protection remains strong against serious illness and death, it may decline somewhat over time and could allow more breakthrough infections, especially of the highly contagious delta variant. The decline tends to be most pronounced in older people and those with certain underlying medical conditions.

Here is a rundown of the booster shot situation for the three vaccines available in the United States.

Pfizer-BioNTech

What you would get: A third full dose, at least six months after your second.

Where it stands in the U.S.: Available now for many people. The FDA has authorized third shots for people over 65, people with certain medical conditions and some others who are at high risk because of where they work or live. (Some immunocompromised people can get a third shot a month after their second.) The agency has put off a decision on whether to authorize boosters for other people.

Where it stands elsewhere: Israel and some other countries are administering Pfizer-BioNTech booster shots widely.

What the science says: The Pfizer-BioNTech vaccine was the first to receive full approval in the United States (for those 16 and older), the first to be authorized for some children (those 12 to 15) and the first to be authorized for boosters; the available data on its safety and effectiveness is especially robust. Some studies suggest that the vaccine may decline in effectiveness over time a bit more than the Moderna vaccine.

Moderna

What you would get: A half-dose, at least six months after your second full dose.

Where it stands in the U.S.: An FDA advisory panel voted Thursday to recommend Moderna boosters for the same population groups now eligible for a Pfizer booster. The panel's vote is nonbinding, but its recommendations are generally followed by the FDA. (Some immunocompromised people can receive a full third dose a month after their second.)

Where it stands elsewhere: Some countries are already offering Moderna booster shots or planning to do so soon.

What the science says: Some studies suggest that the Moderna vaccine's effectiveness declines less than the other two vaccines available in the United States do. That may mean there is less need for Moderna recipients to get boosters. Taking that into account, an FDA staff report took a neutral stance on Moderna's booster shot application.

Johnson & Johnson

What you would get: A second dose, at least two months after the initial dose.

Where it stands in the U.S.: The FDA advisory panel unanimously voted Friday to recommend boosters, even though an FDA staff report found significant shortcomings in the data that the company submitted with its application. The FDA is not required to follow the panel's suggestions, but it usually does.

Where it stands elsewhere: No country has yet authorized administering second doses of the Johnson & Johnson vaccine.

What the science says: The Johnson & Johnson vaccine gives strong initial protection after one dose, although not as strong as the Pfizer or Moderna two-dose vaccines, so there has long been interest in boosters for Johnson & Johnson recipients.

The Indian EXPRESS

US FDA delays decision on Moderna's COVID-19 vaccine for adolescents – WSJ

In June, Moderna filed for U.S. authorization of its vaccine among adolescents aged 12 through 17. The FDA authorized rival Pfizer's vaccine for use in children as young as 12 in May.

By: **Reuters** |
October 16, 2021 9:29:08 am

Moderna's two-shot vaccine has U.S. authorization for emergency use in people aged 18 and above. (Reuters File Photo)

The U.S. health regulator is delaying its decision on authorizing Moderna Inc's COVID-19 vaccine for adolescents to check if the shot could increase the risk of a rare inflammatory heart condition, the Wall Street Journal reported on Friday.

The U.S. Food and Drug Administration (FDA) has been inspecting the risk of the condition, myocarditis, among younger men vaccinated with Moderna's shot, especially versus Pfizer's vaccine, after certain Nordic countries limited use of the shot, the report said, citing people familiar with the matter.

The agency has not yet determined whether there is heightened risk, and the delay could be several weeks, though the timing was unclear, the report said.

In June, Moderna filed for U.S. authorization of its vaccine among adolescents aged 12 through 17. The FDA authorized rival Pfizer's vaccine for use in children as young as 12 in May.

The U.S. FDA's review of Moderna's application is ongoing, an FDA spokesperson told Reuters, adding that while the agency cannot predict how long the process may take, it is evaluating the data as expeditiously as possible.

Europe's drug regulator found in July that such inflammatory conditions could occur in very rare cases following vaccination with Moderna's vaccine or Pfizer/BioNTech's shot, more often in younger men after the second dose.

However, the regulator stressed that the benefits of the shots outweighed any risks. Earlier this month, Finland, Sweden and Denmark paused the use of Moderna's shot for younger males due to reports of myocarditis, though the Danish Health Agency later said the vaccine was available to under-18s.

Moderna's two-shot vaccine has U.S. authorization for emergency use in people aged 18 and above. The FDA in June added a warning to the literature accompanying Pfizer/BioNTech and Moderna COVID-19 shots to indicate the rare risk of heart inflammation.

The Indian EXPRESS

Global Hunger Index 2021: India slips to 101st spot, behind Pakistan, Bangladesh, Nepal

With this, only 15 countries, like Papua New Guinea (102), Afghanistan (103), Nigeria (103), Congo (105), fared worse than India this year.

By: **Express Web Desk** | New Delhi |
Updated: October 15, 2021 10:44:07 am

However, India has shown improvement in indicators like the under-5 mortality rate, prevalence of stunting among children and prevalence of undernourishment owing to inadequate food, the report said. (Representational image)

India has slipped to the 101st position among 116 countries in the Global Hunger Index (GHI) 2021 from its 2020 ranking (94), to be placed behind Pakistan, Bangladesh and Nepal.

With this, only 15 countries — Papua New Guinea (102), Afghanistan (103), Nigeria (103), Congo (105), Mozambique (106), Sierra Leone (106), Timor-Leste (108), Haiti (109), Liberia (110), Madagascar (111), Democratic Republic of Congo (112), Chad (113), Central African Republic (114), Yemen (115) and Somalia (116) — fared worse than India this year.

A total of 18 countries, including China, Kuwait and Brazil, shared the top rank with GHI score of less than five, the GHI website that tracks hunger and malnutrition across countries said on Thursday.

The report, prepared jointly by Irish aid agency Concern Worldwide and German organisation Welt Hunger Hilfe, mentioned the level of hunger in India as "alarming" with its GHI score decelerating from 38.8 in 2000 to the range of 28.8 – 27.5 between 2012 and 2021.

The GHI score is calculated on four indicators — undernourishment; child wasting (the share of children under the age of five who have low weight for their height, reflecting acute undernutrition); child stunting (children under the age of five who have low height for their age, reflecting chronic undernutrition); child mortality (the mortality rate of children under the age of five).

According to the report, the share of wasting among children in India rose from 17.1 per cent between 1998-2002 to 17.3 per cent between 2016-2020, "People have been severely hit by COVID-19 and by pandemic related restrictions in India, the country with highest child wasting rate worldwide," the report said.

Neighbouring countries like Nepal (76), Bangladesh (76), Myanmar (71) and Pakistan (92), which are still ahead of India at feeding its citizens, are also in the 'alarming' hunger category.

However, India has shown improvement in indicators like the under-5 mortality rate, prevalence of stunting among children and prevalence of undernourishment owing to inadequate food, the report said.

Stating that the fight against hunger is dangerously off track, the report said based on the current GHI projections, the world as a whole — and 47 countries in particular — will fail to achieve even a low level of hunger by 2030.

"Although GHI scores show that global hunger has been on the decline since 2000, progress is slowing. While the GHI score for the world fell 4.7 points, from 25.1 to 20.4, between 2006 and 2012, it has fallen just 2.5 points since 2012. After decades of decline, the global prevalence of undernourishment — one of the four indicators used to calculate GHI scores — is increasing. This shift may be a harbinger of reversals in other measures of hunger," the report said.

Food security is under assault on multiple fronts, the report said, adding that worsening conflict, weather extremes associated with global climate change, and the economic and health

challenges associated with Covid-19 are all driving hunger.

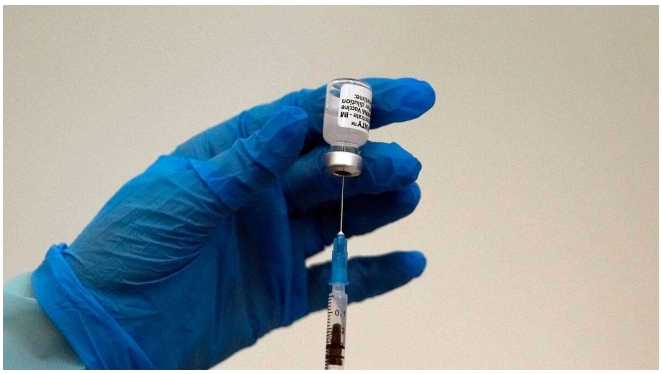
"Inequality — between regions, countries, districts, and communities — is pervasive and, (if) left unchecked, will keep the world from achieving the Sustainable Development Goal (SDG) mandate to "leave no one behind," it said.

The Indian EXPRESS

India resumes COVID-19 vaccine export

External Affairs Ministry Spokesperson Arindam Bagchi said the government has decided to send the supplies to the neighbourhood initially.

By: **PTI** | New Delhi |
Updated: October 14, 2021 9:26:33 pm



Last month, Union Health Minister Mansukh Mandaviya announced that India will resume the supplies abroad. (File Photo: AP)

Coronavirus vaccines have been sent to Nepal, Bangladesh, Myanmar and Iran according to the government's decision to resume their supplies, the Ministry of External Affairs said on Thursday.

External Affairs Ministry Spokesperson Arindam Bagchi said the government has decided to send the supplies to the neighbourhood initially.

India, the world's largest producer of vaccines overall, suspended exports of COVID-19 vaccines in April to focus on inoculating its own population following a sudden spike in infections.

Last month, Union Health Minister Mansukh Mandaviya announced that India will resume the supplies abroad.

"Prime Minister Narendra Modi said recently at the UN General Assembly that India will resume supply of coronavirus vaccines. We have decided to start with the neighbourhood," Bagchi said.

"As far as I know, vaccines have already gone to Nepal, Bangladesh, Myanmar and Iran. We are constantly monitoring and reviewing the situation," he said.

Bagchi said the decision on further supplies will be based on India's production and demand.

"We will decide on further supplies based on our production and demand," he said.

The Indian EXPRESS

Global Covid wrap: Russia records highest cases ever; Australia's Victoria looks at lockdown exit despite surge and more

Despite the mounting toll, Russia has ruled out a new lockdown like the one during the first months of the pandemic, which badly crippled the economy and dented Putin's ratings

By: Express Web Desk |
Updated: October 14, 2021 11:17:14 pm

Russia reported the highest daily coronavirus cases since the start of the pandemic in 2020, while Australia saw a surge in infections even as its Victoria state towards easing COVID-19 restrictions. The UK, meanwhile, reported over 45,000 daily cases, with the infection being prevalent in children.

Here are the developments on the pandemic from across the globe:

Russia

Russia on Thursday recorded the highest daily numbers of coronavirus infections and deaths since the start of the pandemic, a rapidly surging toll that has severely strained the nation's health care system. The government's coronavirus task force reported 31,299 new confirmed coronavirus cases and 986 deaths in the last 24 hours.

The country has repeatedly marked record daily death tolls over the past few weeks as infections surged amid a slow vaccination rate and lax enforcement of measures to protect against the coronavirus.

Prime Minister Mikhail Mishustin said Tuesday that about 43 million Russians, or just about 29% of the country's nearly 146 million people, were fully vaccinated. Russian President Vladimir Putin has emphasized the need to speed up the vaccination rate, but he also has cautioned against forcing people to get vaccine shots.

Despite the mounting toll, the Kremlin has also ruled out a new nationwide lockdown like the one during the first months of the pandemic, which badly crippled the economy and dented Putin's ratings, while delegating the power to enforce coronavirus restrictions to regional authorities.

Russia called on pension-age doctors who quit during the pandemic for safety reasons to return to their jobs amid the soaring number of cases.

Australia

Coronavirus case numbers in Australia's Victoria state surged to 2,297, the highest daily infections in the country since the pandemic began last year. Officials said that 11 COVID-19 deaths were also recorded in the latest 24-hour period.

The number of cases on Thursday, up from 1,571 the day before, is the highest for any Australian state or territory since the pandemic began. Most new cases were detected in Melbourne, but the city's night curfew will also be lifted, while businesses can reopen with strict social distancing rules, according to the roadmap. More curbs will be relaxed when vaccination levels reach 80% and 90%.

But officials said Thursday the state will open up from pandemic restrictions as planned when the 70% double dose vaccination rates for people age 16 and older are reached sometime next week.

State Premier Daniel Andrews says the case numbers will be "less relevant" once the vaccination target is reached. "We will deliver the (reopening) road map … You get vaccinated and we will open up and I do what I say," Victoria Premier Andrews said, speaking during a media briefing in Melbourne, the state capital.

New Zealand

New Zealand reported its biggest rise in COVID-19 infections in six weeks, with all cases detected in Auckland, raising prospects of a further extension of lockdown restrictions in the country's largest city beyond next week.

Some 1.7 million people in Auckland are under strict stay-home orders until Monday as officials look to stamp out the Delta outbreak.

Deputy Prime Minister Grant Robertson said, "Now is not the time for complacency." He urged residents in Auckland to strictly follow the level-three rules, under which most people are required to stay at home unless they have urgent reasons to go out.

South Korea

South Korea reported more than 1,000 new coronavirus infections for the 100th consecutive day as the outbreak continued to spread in the country. Health officials said 1,580 of the 1,940 new cases reported Thursday are in the Seoul metropolitan region.

The capital area has been under South Korea's toughest social distancing measures short of a lockdown since July. Private social gatherings of three or more people are banned after 6 pm unless all participants are fully vaccinated.

Officials say people's frustration with social distancing is becoming an increasing challenge and hope the improving vaccination rate will allow more flexible measures soon.

UK

Britain recorded more than 45,000 daily coronavirus cases on Thursday, with infections particularly prevalent among children. 157 virus-related deaths were reported Thursday, taking Britain's confirmed total to 138,237, Europe's second-highest tally.

Government figures show 45,066 people tested positive for the coronavirus, the highest since July 20. Much of the recent increased cases in the UK is among children after their return to school. The rollout of vaccines among older children is widely considered slower than hoped.

There's also been a rise in hospital treatment for COVID-19, though the proportion is lower than previous waves of the pandemic after the rollout of vaccines.

Japan

Japan's government will begin preparations to restart a popular subsidised travel programme that was suspended late last year due to the coronavirus pandemic, Prime Minister Fumio Kishida said on Thursday.

In a news conference, Kishida also said he will deliver a stimulus package worth "several tens of trillion yen" that includes spending to promote domestic development and production of vaccines and COVID-19 drugs.

Indonesia

The Indonesian resort island of Bali reopened for international travelers for the first time in more than a year Thursday if they're vaccinated, test negative, hail from certain countries, quarantine and heed restrictions in public.

However, foreign visitors may be slow to arrive. No international flights to Bali were scheduled on the first day of the reopening and a tourism official forecast travel would pick up in November.

Luhut Binsar Pandjaitan, the government minister who leads the COVID-19 response in Java and Bali, said visitors will have to follow stringent rules at hotels, in restaurants and on beaches.

China

China, where new proposed team will soon visit to probe the origins of COVID-19, warned against what it called possible "political manipulation" and said it would support the World Health Organisation's efforts.

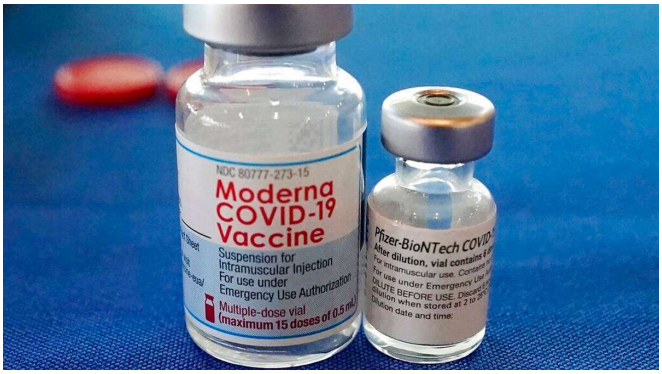
Beijing was accused of withholding raw data on early cases during a visit by a WHO team in February and has since resisted calls for further investigation, saying the US and others were politicizing the matter.

The Indian EXPRESS

FDA panel endorses lower-dose Moderna COVID shot for booster

Many people who got their initial Pfizer shots at least six months ago are already getting a booster after the FDA authorised their use last month.

By: **AP** | Washington |
October 15, 2021 10:26:24 am



This photo shows vials of the Moderna and Pfizer Covid-19 vaccines. (Photo: AP)

US health advisers said Thursday that some Americans who received Moderna's COVID-19 vaccine should get a half-dose booster to bolster protection against the virus.

The panel of advisers to the Food and Drug Administration voted unanimously to recommend a booster shot for seniors, adults with other health problems, jobs or living situations that put them at increased risk for COVID-19.

The recommendation is non-binding but it's a key step toward expanding the US booster campaign to millions more Americans.

Many people who got their initial Pfizer shots at least six months ago are already getting a booster after the FDA authorised their use last month.

As for the dose, initial Moderna vaccination consists of two 100-microgram shots. But Moderna says a single 50-microgram shot should be enough for a booster.

The agency convened its experts Thursday and Friday to weigh-in on who should get boosters and when for people that received the Moderna and Johnson & Johnson shots earlier this year.

The FDA will use its advisers' recommendations in making final decisions for boosters from both companies. Assuming a positive decision, there's still another hurdle: Next week, a panel convened by the Centers for Disease Control and Prevention will offer more specifics on who should get one.

The Indian EXPRESS

Health Ministry raises alert over Covid team vacancies: 'Acute stress'

This is the second time in two months that Health Secretary Rajesh Bhushan has highlighted vacancies in the Health Ministry.

Written by Harikishan Sharma | New Delhi |
Updated: October 15, 2021 7:28:37 am

Health Secretary Rajesh Bhushan sought "early and timely action" to fill up the existing vacancies "and also the vacancies arising in the coming weeks".

THE Union Health Ministry has raised concern over vacancies in nine senior officer posts in its Covid team, saying this had put it under "acute stress".

In a letter dated October 13 to Deepti Umashankar, Establishment Officer and Additional Secretary, DoPT, Health Secretary Rajesh Bhushan said, "As you are aware that even though the pandemic of Covid-19 is declining, however we cannot let our guard down. At this crucial juncture, the Ministry of Health and Family Welfare is required to put in extra efforts to ensure full preparedness across the country. Vacant positions of one Joint Secretary and eight DS (Deputy Secretaries) / Directors have put this ministry under acute stress."

Bhushan sought "early and timely action" to fill up the existing vacancies "and also the vacancies arising in the coming weeks".

This is the second time in two months that Bhushan has highlighted vacancies in the Health Ministry. On August 12, he had written to the DoPT (Department of Personnel and Training) about the unfilled posts of additional secretary, joint secretary, director and deputy secretary under the Central Staffing Scheme of the Central Secretariat Services (CSS) in the Health Ministry.

Asked about the letter, a Health Ministry official, who refused to be named, said: "Each ministry gives the list of vacancies every month to the DoPT. Otherwise how would they fill the vacancies?"

With his October 13 letter, Bhushan shared a list of 11 officers who have moved out of the ministry or are about to do so. On the top is Vandana Gurnani, Additional Secretary and Mission Director, National Health Mission, who went on one-year study leave in September 2021. The others include Joint Secretary Nipun Vinayak, who looked after oxygen supply during the severe Covid second wave and was repatriated prematurely to his Maharashtra cadre on August 31; and Joint Secretary Lav Agarwal, who has been the face of the ministry at Covid briefings and completes his tenure with the Health Ministry on November 28.

Bhushan also named Bindu Tewari, an IRSME (Indian Railway Service of Mechanical Engineers) official working in the Ministry as Director, who was repatriated to her parent cadre on July 7; and N Yuvaraj, who was moved out as Director from the Health Ministry to Joint Secretary in the Department of Pharmaceuticals.

Besides them, Mahatme Sandeep Namdeo, posted in the Ministry as Deputy Secretary, is now Private Secretary to Ashwini Vaishnaw, Minister for Communication; Yatish S G, another Deputy Secretary-level officer, was permanently repatriated to his parent IRTS cadre on September 13; and Vidushi Chaturvedi, Director in the Health Ministry, is "awaiting approval" for her selection as Deputy Director General in the UIDAI.

CSS officers Vandana Jain and S K Jha, both Directors in the Ministry, have got promotions as Joint Secretaries. While Jain is Joint Secretary in the Health Ministry, Jha has moved to the

Department of Revenue, relieved with effect from August 26.

Another CSS officer and Director, Health Ministry, N B Mani, died during the second Covid wave.

The Indian EXPRESS

Announcements on trains, planes when India touches 100-crore Covid vaccine mark: Mandaviya

Private carrier Spicejet will also wrap its planes with posters carrying images of PM Modi and health workers, Health Minister Mansukh Mandaviya said on Thursday.

By: PTI | New Delhi |
Updated: October 14, 2021 10:00:45 pm

A young woman after receiving the vaccine for Covid-19 at a vaccination center in Bengaluru. (AP)

Announcements will be made on airplanes, ships, metros and at railway stations when India achieves its target of 100 crore Covid-19 vaccine doses while private carrier Spicejet will wrap its planes with posters of this milestone carrying images of Prime Minister Narendra Modi and health workers, Health Minister Mansukh Mandaviya said on Thursday.

The 100 crore doses target is expected to be achieved by October 18 or 19, he said while launching a coffee table book on Covid warriors.

The total vaccine doses administered in the country crossed 97 crores on Thursday with 73 per cent of all adults having administered the first dose and 30 per cent having received both doses.

"The nation is rapidly approaching the 100 crore vaccination mark! 97 crore Covid-19 vaccine doses administered to date. Keep it up India, let us fight corona," Mandaviya tweeted.

"After 100 crore doses is achieved, we will go in mission mode to ensure that those who have taken their first dose take their second dose too to ensure they are protected against Covid-19," he told reporters.

Mandaviya said that Spicejet will wrap planes with posters of one billion vaccines with images of Prime Minister Narendra Modi and healthcare workers on the day the target of 100 crore doses is achieved.

He launched 13 videos on Covid-19 warriors and a coffee table, published by the health ministry, to pay tributes to them.

The total vaccine doses administered in the country crossed 97 crores on Thursday. (File/PTI)

From eight states, 13 Covidwarriors, including doctors, ambulance drivers, volunteers and

other healthcare staffers have been identified as 'Sentinels of the Soil'.

The coffee table book pays tribute to the ambulance driver, who without waiting for the last rites of his loved ones to be completed, rushed to resume his duties.

"As the vaccination drive picked up in India, the challenge was not only demographic but topographic too. The credit goes to the team of healthcare and frontline workers who took it upon themselves to ensure that everyone was covered. It was not an easy task as deep-rooted hesitancy had to be overcome and rampant myths about vaccination had to be countered," Mandaviya said.

The book salutes the doctors and nurses in a remote tribal area, who worked tirelessly to overcome the entrenched hesitancy against vaccination in his community, so that science could prevail over superstition. The book celebrates the young volunteers, 'Sathiyas' (friends) of Rashtriya Kishor Swasthya Karyakram, for finding ingenious new ways to bust myths and for taking the lead in making their community understand the importance of vaccination in keeping them safe from Covid-19.

One of the most critical aspects during the Covid-19 pandemic and the vaccination drive was to provide factual information on a real-time basis to people. Community radio stations played a significant role in disseminating correct information to people at a time when they were mostly confined to their homes.

The book also pays tribute to some of these community radio station announcers who enthused communities to take the vaccine and walked the talk by being the first to do so themselves.

On Biological E's vaccine, Mavdaviya said due to delay in receiving raw materials Biological E's vaccine got delayed but by November end the data would be submitted.

The Indian EXPRESS

J-K achieves 100% coverage of first dose of Covid-19 vaccine

Active cases declined to 2.06 lakh (2,06,586), comprising 0.61 per cent of the total infections. Meanwhile the national Covid recovery rate was recorded at 98.07 per cent, as per the Union Health Ministry's data.

By: Express Web Desk | New Delhi |
Updated: October 14, 2021 9:46:48 pm

Mumbai: A health worker inoculates a beneficiary with a dose of Covid-19 coronavirus vaccine in Mumbai. (PTI Photo/Kunal Patil)

Jammu and Kashmir on Thursday achieved 100 per cent coverage of the first dose of Covid-19 vaccines for the age group of 18 years and above, even as the Union territory recorded 93 fresh cases of coronavirus, taking the infected number of persons to 3,30,834, news agency PTI reported.

As many as 82,229 doses of the Covid-19 vaccine were administered in the last 24 hours across the UT bringing the cumulative number of doses administered in the UT to 1,34,94,675, the official data said.

Meanwhile, J-K registered 93 new positive coronavirus cases on Thursday — 21 from Jammu division and 72 from Kashmir division

India records 18,987 new Covid-19 cases; active cases decline to 2.06 lakh

India recorded 18,987 new coronavirus cases and 246 new fatalities in the last 24 hours ending at 8 am on Thursday. With this, the country's caseload rose to 3.4 crore (3,40,20,730), while the death toll rose to 4.51 lakh (4,51,435).

Active cases declined to 2.06 lakh (2,06,586), comprising 0.61 per cent of the total infections. Meanwhile, the national Covid-19 recovery rate was recorded at 98.07 per cent, as per the Union Health Ministry's data.

A decrease of 1,067 cases has been recorded in the active Covid-19 caseload in a span of 24 hours.

India's Covid vaccination set to reach 100-crore mark in October

India is set to touch a significant landmark — 100 crore vaccine doses — this month, a top government source said. As the focus is on vaccinating the entire eligible population as early as possible, the government will consider exporting the vaccines only in the fourth quarter.

"Export of vaccines is not the priority now. We will see what the excess production is in the fourth quarter and will decide on exporting," said the source. However, the source added that India has not decided on providing booster doses for the vulnerable yet.

Maharashtra crosses 9-cr Covid vaccinations, Mumbai and Pune together account for 46% active infections

Maharashtra on Wednesday crossed the landmark of 9 crore Covid vaccination doses, of which nearly 3 crore beneficiaries are fully vaccinated. "We have fully vaccinated a population of 2.76 crore, which is the highest for any state in the country," Dr Pradeep Vyas, additional chief secretary (health), Maharashtra, told The Indian Express.

Overall, 6.23 crore beneficiaries in the state have been vaccinated with one dose. Mumbai and Pune have administered 1.38 crore and 1.13 crore vaccine doses, respectively, till date. Of this, 49.8 lakh residents are fully vaccinated in Mumbai while 38.4 lakh have got both doses in Pune district.

India lifts travel curbs on those arriving from UK

Days after the UK government lifted restrictions on Indian travellers who are fully vaccinated with Covishield or another UK-approved vaccine, India has withdrawn a travel advisory that added Covid-19 related additional checks and restrictions on those arriving from Britain, including a mandatory 10-day quarantine.

The Indian EXPRESS

Data from federal scientists raise questions about Johnson & Johnson booster shot

The agency's panel of vaccine advisers will meet Thursday and Friday to vote on whether to recommend that the agency allow Moderna and Johnson & Johnson to offer booster shots.

By: **New York Times** |
Updated: October 14, 2021 9:52:13 am

People who received a Johnson & Johnson coronavirus vaccine may be **better off with a booster shot from Moderna or Pfizer-BioNTech**, according to preliminary data from a federal clinical trial published Wednesday.

This Dec. 2, 2020 photo provided by Johnson & Johnson shows vials of the COVID-19 vaccine in the United States. (Johnson & Johnson via AP)

That finding, along with a mixed review by the Food and Drug Administration of the case made by Johnson & Johnson for an authorization of its booster, could lead to a heated debate about how and when to offer additional shots to the 15 million Americans who have received the single-dose vaccine.

The agency's panel of vaccine advisers will meet Thursday and Friday to vote on whether to recommend that the agency allow Moderna and Johnson & Johnson to offer booster shots.

Despite the questions raised by the new data on the strength of Johnson & Johnson's boosters, some experts anticipated that the agency would clear the shots anyway, since the effectiveness of the one-shot vaccine is lower than that of the two-dose mRNA vaccines made by Moderna and Pfizer-BioNTech. And the broader public may also be expecting the authorizations, given the Biden administration's push for boosters from all brands.

Once the agency authorized a booster from Pfizer-BioNTech last month, "the die was cast," said John Moore, a virus expert at Weill Cornell Medicine.

The Pfizer and Moderna vaccines are by far the most used in the United States, with more than 170 million people in the United States fully immunized with either one or the other vaccine.

When Johnson & Johnson's was authorized in February, public health experts were eager to deploy the "one-and-done" option, particularly in communities with poor access to health care. But the shot's popularity plummeted when the FDA later paused its use to investigate rare blood-clotting cases.

For those who have received the Johnson & Johnson vaccine, the timing of a booster authorization — of any brand — is still uncertain. The FDA panel is set to vote Friday only on whether the agency should permit a second dose of the Johnson & Johnson vaccine, a scenario the Centers for Disease Control and Prevention's own vaccine advisory committee will discuss next week. If both agencies believe an additional dose should be offered, people could seek them out as early as next week.

Whether the FDA might authorize the mix-and-match approach, and how, is unclear. The strategy will be discussed at the agency panel's meeting Friday, but no vote will be taken. If regulators eventually believe there is enough scientific support for the approach, they would likely need to update the authorization language of the Moderna and Pfizer-BioNTech vaccines to allow for their use in people who initially received Johnson & Johnson's.

In a study conducted by the National Institutes of Health, researchers organized nine groups of roughly 50 people each. Each group received one of the three authorized vaccines, followed by a booster. In three groups, volunteers received the same vaccine for a boost. In the other six, they switched to a different brand.

The researchers found that those who got a Johnson & Johnson shot followed by a Moderna booster saw their antibody levels rise 76-fold within 15 days, whereas those who received another dose of Johnson & Johnson saw only a fourfold rise in the same period. A Pfizer-BioNTech

booster shot raised antibody levels in Johnson & Johnson recipients 35-fold.

The authors cautioned about the study's small size and noted that they did not follow the volunteers long enough to identify rare side effects.

Scott Hensley, an immunologist at the University of Pennsylvania who was not involved in the new study, found the results compelling. He noted, however, that the trial only looked at antibody levels, which on their own are an insufficient measure of how well different combinations of vaccines would lower COVID-19 infections and hospitalizations.

"At the end of the day, folks having the Johnson & Johnson should probably get an mRNA booster," he said. "It's just a matter of, how much data does the FDA need before making that recommendation?

"I wouldn't want to be in their shoes," he added.

Some scientists question how the federal government is considering boosters of any brand, given the limited data provided not only by Johnson & Johnson but also the other companies as well.

"There are some of us who would really like to see more data," said Dr. Celine Gounder, an infectious disease specialist at Bellevue Hospital Center in New York. "And then there are others who want to just move forward on boosters."

Earlier Wednesday, an FDA analysis questioned a key test used by the company, known as a psVNA assay, saying it may have skewed the findings.

"It is likely that the results seen are due to the low sensitivity of the psVNA assay used," the FDA stated in its report. The regulators also said that they did not have enough time to independently review much of the raw data from the company's trials.

Johnson & Johnson in a statement said it looked forward to discussing the data Friday, when panelists will also hear a presentation on the mix-and-match study.

The FDA's discussion this week of the Johnson & Johnson vaccine has big implications for the shot's future in the United States, said Jason Schwartz, an associate professor of health policy at the Yale School of Public Health. The vaccine was already unlikely to gain more acceptance in the country in the long run, he said. And if the FDA ultimately recommends a booster shot for Johnson & Johnson recipients of a different vaccine, he added, "it's hard to see what would steer people to the J&J vaccine."

The FDA has already authorized an additional shot of the Pfizer-BioNTech vaccine for people older than 65 years or those 18-65 with underlying health conditions or job exposures that put them at higher risk. Moderna's application, which will be discussed Thursday, may also win authorization, despite limited evidence that the protection provided by the initial two-dose regimen of Moderna is waning.

Regulators on Wednesday wrote that a single shot of the Johnson & Johnson vaccine "still affords protection against severe COVID disease and death in the United States." But they also said that the highest estimates of protection, including for severe COVID, were "consistently less than the highest effectiveness estimates" for the Moderna and Pfizer-BioNTech shots.

A clinical trial showed that one dose of J&J had an efficacy rate of 66% against moderate to severe COVID worldwide and 74% in the United States. Its efficacy against either severe or critical disease was stronger, at 85% worldwide.

In its application for a booster, Johnson & Johnson included the results of another large-

scale trial that began in November 2020 in which they gave half their volunteers a second dose two months after the first. The other half received a placebo.

In August, the company announced that in the portion of the trial that took place in the United States, the efficacy rose to 94%. But in its report, the FDA focused on the worldwide results in which the increase was more modest, rising to 75%.

Hensley cautioned that the efficacy estimates from the trials had a fairly wide range of uncertainty. "What that tells you is that the slight changes in effectiveness here might be due to chance," he said.

Against severe to critical COVID disease, two shots had an efficacy of 100%. But regulators warned in the analysis posted Wednesday that there was little data from that trial on the delta variant, which now causes the vast majority of infections in the United States.

The Indian EXPRESS

J&J Covid-19 shot gets better boost from Moderna or Pfizer in NIH study

The study, which included more than 450 adults who received initial shots from Pfizer, Moderna, or Johnson & Johnson, showed that "mixing and matching" booster shots of different types is safe in adults.

By: Reuters |
Updated: October 14, 2021 8:20:40 am

People who got Johnson & Johnson Inc's Covid-19 vaccine as a first shot had a stronger immune response when boosted with vaccines from Pfizer Inc /BioNTech SE or Moderna Inc, a study run by the National Institutes of Health showed on Wednesday.

Moderna's and Pfizer's vaccines are based on messenger RNA while J&J's uses viral vector technology. (Reuters)

The study, which is preliminary and hasn't been peer reviewed, is the latest challenge to J&J's efforts to use its Covid-19 vaccine as a booster in the United States.

The study, which included more than 450 adults who received initial shots from Pfizer, Moderna, or Johnson & Johnson, showed that "mixing and matching" booster shots of different types is safe in adults.

Moderna's and Pfizer's vaccines are based on messenger RNA while J&J's uses viral vector technology.

It comes as an advisory group to the U.S. Food and Drug Administration is preparing to meet later this week to discuss the merits of a booster shot for Moderna and J&J vaccines.

FDA officials on Wednesday said J&J's regulatory submission for its planned booster raised red flags including small sample sizes and data based on tests that had not been validated.

U.S. health officials have been under pressure to offer advice on booster doses of the J&J and Moderna COVID-19 vaccines after the White House announced in August it planned to roll out boosters beginning last month for most adults.

The NIH study contrasted the safety and immune response of volunteers who were boosted with the same type of shot they had been given for their initial vaccination with those who received a different type of shot as a booster.

Mixing and matching doses for a booster produced similar side effects to those seen in primary inoculations and raised no significant safety concerns, the study said.

The study of the three COVID-19 vaccines currently authorized in the United States showed that using different types of shots as boosters generally appeared to produce a comparable or higher antibody response than using the same type.

The trial took place in 10 U.S. cities and used a total of nine combinations of initial shots and boosters.

Mixing booster doses "may offer immunological advantages to optimize the breadth and longevity of protection achieved with currently available vaccines," researchers wrote in the study.

The Indian EXPRESS

TN set to be 1st State to give children aged 2-18 years vaccine after experts' approval: Health Minister

The Centre has made a formal announcement on the vaccine and sent the proposal for an expert opinion, and once Tamil Nadu gets the nod, the State would be the first to administer the vaccine, Ma Subramaniam told reporters in Coimbatore.

By: **PTI** | Coimbatore |
October 14, 2021 7:26:55 am

Tamil Nadu is to become the first in the country to administer Covid-19 vaccines to those aged 2-18 years, said State Health Minister M Subramaniam on Wednesday.

The Centre has made a formal announcement on the vaccine and sent the proposal for an expert opinion, and once Tamil Nadu gets the nod, the State would be the first to administer the vaccine, Subramaniam told reporters in Coimbatore.

An expert panel of the Central drug authority has recommended granting emergency use authorisation to Bharat Biotech's Covaxin for children and adolescents in the 2 to 18 years age group with certain conditions, sources said on Tuesday. If approved by the Drugs Controller General of India (DCGI), it would be the second Covid-19 vaccine after Zydus Cadila's needle-free ZyCoV-D to receive EUA for use in those below 18 years.

Tamil Nadu was the first also in inoculating pregnant women after the Centre announced the scheme for them, he said.

So far, over five lakh such women were given the vaccines, he said. Subramaniam was here to participate in various functions, including the one at a private educational institution where he launched projects to create awareness among the public on 'No Food Waste,' 'Hand Wash' and 'Re-purpose Used Cooking Oil.'

Lauding the district administration and health department, Subramaniam appreciated the task being taken by the administration to enter into record books by converting the used cooking oil into bio-diesel. Brazil holds the Guinness record by recycling 550 tonnes of used oil in a month.

Stating that Coimbatore is number-one in Tamil Nadu by vaccinating 93 per cent of the population with the first dose and 37 per cent with the second dose of Covid-19 vaccine, the

Minister said that to reach 100 per cent through door-to-door service, five mobile vans were launched for five zones of the city.

A little over 5.51 lakh people were inoculated through five mega camps, he said.

Also, he inaugurated a Rs.1.5-crore Special Newborn Care Unit in the Coimbatore Medical College and Hospital, particularly to treat infants born weighing less than 1.5 kg.

On the functioning of Amma Clinics, he said they were a temporary arrangement. Once the DMK government introduced the door-to-door campaign, there was no need for such clinics and their staff were shifted to health departments.

To a question on NEET, Subramaniam said Chief Minister M K Stalin has sent letters to 12 Chief Ministers on the need to scrap the test and that it was certain that Tamil Nadu would become a model State in abolishing the NEET.

To a question on admission to medical colleges, the Minister said the government has taken steps to admit 1,650 students to 11 medical colleges this academic year. Already, 850 seats have been allotted, another 800 seats would be allotted once the infrastructure is ready, he said.

The Indian EXPRESS

Clearance to Covaxin for younger children is crucial when schools and colleges are re-opening

Covaxin's application for emergency use authorisation from the World Health Organisation has been pending for a long time now. Proactive disclosure of relevant trial data can help in clearing such bottlenecks.

By: Editorial |
Updated: October 14, 2021 7:45:36 am

There are still about 24-25 crore people in India above the age of 18 who are yet to get a single dose.

With Bharat Biotech-developed Covaxin receiving a recommendation for approval for use among children over two years of age, India is now the only country to have a Covid-19 vaccine for every age group. No other vaccine has so far been approved for infants and young children. Pfizer and BioNTech had announced last month that their vaccine had elicited robust responses among children of 5 to 11 years of age in phase 2/3 trials, but that is yet to be approved. As of now, only three vaccines are available for the 12-18 age bracket, those developed by Pfizer/BioNTech and Moderna, and another by Zydus which was cleared by India in August.

The formal clearance to Covaxin for younger children brings in another layer of protection against Covid-19. This is crucial at a time when schools and colleges are opening up, and there is a discernible rise in the number of infections amongst children, even those below 10 years of age. As reported by this newspaper, the proportion of children in the new infections has been much higher in July and August this year, compared to any time earlier in the pandemic. This is not surprising given the fact that a large proportion of the adult population could have

developed some immunity, either because of a prior infection, or due to vaccination. Reassuringly, there is no perceptible rise in serious cases amongst children.

There are still about 24-25 crore people in India above the age of 18 who are yet to get a single dose. Among them are the elderly and the sick, and those in remote areas where access to vaccines is not easy. Among those who have received the first dose, less than 30 per cent are fully vaccinated. The exercise to vaccinate children must not slow down vaccinations in this group, which must continue to remain the priority. Bharat Biotech is yet to release the data from phase 2/3 trials on the basis of which it has received the recommendation for approval for use among children. While the company says it would soon publish the results in a journal, it would have been better if it had made the results public before the approval — it would help build confidence among the public. Covaxin's application for emergency use authorisation from the World Health Organisation has been pending for a long time now. Proactive disclosure of relevant trial data can help in clearing such bottlenecks.

The Indian EXPRESS

WHO says approval process for Russia's Sputnik V vaccine 'still on hold'

Russian Health Minister Mikhail Murashko earlier this month said that all barriers to register the vaccine with the WHO had been cleared and only some paperwork remained to be completed.

By: **Reuters** |
Updated: October 13, 2021 10:27:01 pm

Sputnik V is a two-dose shot which has been found to be 91.6 percent effective against Covid-19. (File)

The World Health Organization said on Wednesday the Emergency Use Listing process for Russia's Sputnik-V COVID-19 vaccine was on hold pending some missing data and legal procedures, which the UN body hopes will be "sorted out quite soon".

"We are working almost on a daily basis with the ministry of health in Russia to address the remaining issues to be fulfilled by the Russian Direct Investment Fund," said Mariangela Simao, WHO assistant director-general for access to medicines and health products.

Simao said that as soon as an agreement was reached, WHO will reopen the case and assess data that was submitted, even though it was "still incomplete" and resume manufacturing site inspections in Russia.

"All submissions that we have, they are addressed the same way," she said and did not specify a timeline for when the listing process could be completed.

Russian Health Minister Mikhail Murashko earlier this month said that all barriers to register the vaccine with the WHO had been cleared and only some paperwork remained to be completed.

The Indian EXPRESS

India's Covid vaccination set to reach 100-crore mark in October

India has already vaccinated 96 crore people – 73 per cent of the eligible people received the first dose and 29 per cent have got both doses.

Written by **Liz Mathew** | New Delhi |
Updated: October 14, 2021 1:49:42 am

A beneficiary gets a Covid-19 vaccine shot in Navi Mumbai. (Express photo: Amit Chakravarty)

With the central government likely to showcase its Covid-19 vaccination programme as a big achievement in the upcoming elections, it is set to touch another landmark — of 100 crore vaccine doses — this month, a top government source said.

As the focus is on vaccinating the entire eligible population as early as possible, the government will consider exporting the vaccines only in the fourth quarter.

"Export of vaccines is not the priority now. We will see what the excess production is in the fourth quarter and will decide on exporting," said the source.

However, the source added that India has not decided on providing booster doses for the vulnerable yet. "There is no expert opinion in India over the booster doses," he said. Experts from the WHO had recommended that Covid - 19 booster doses should be offered to moderately and severely immunocompromised people.

India has already vaccinated 96 crore people – 73 per cent of the eligible people received the first dose and 29 per cent have got both doses.

The country will produce 28 crore doses of vaccines in October, of which 22 crore will be Covishield and six crore will be Covaxin. As many as 60 lakh doses of Zydus Cadila's three-dose Covid-19 vaccine ZyCoV-D are ready for distribution. The Ahmedabad-based pharma company had received the emergency use authorisation from the Drugs Controller General of India (DCGI) in August. ZyCoV-D, a needle-free coronavirus vaccine, is the world's first plasmid DNA vaccine for Covid-19.

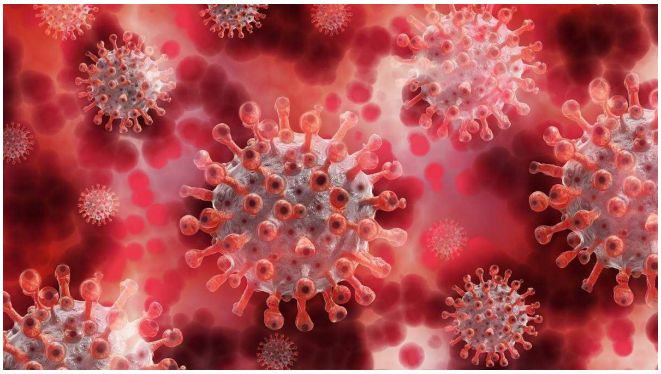
States are provided adequate numbers to keep up pace in vaccination, the source added. "As of today, there are 8 crore vaccines lying with the states across the country. But almost all the states are trying their best and most of the states have vaccinated more than 60 per cent of their population."

The Indian EXPRESS

WHO will announce new team to study coronavirus origins

Its new advisory team will include specialists in fields like laboratory safety and biosecurity, a step that analysts say may help placate Western governments pressing for consideration of whether the virus emerged from a lab

By: New York Times |
October 13, 2021 8:41:04 am



Written by Benjamin Mueller

The position is unpaid. The world's scientists and internet sleuths will scrutinize every move. Completing the first assignment with the available tools, and to everyone's satisfaction, will be nearly impossible.

Despite those considerable obstacles, more than 700 people have applied for spots on a new committee charged with breathing life into the World Health Organization's stalled inquiry into the origins of the coronavirus pandemic.

The committee, expected to be announced this week, represents an attempt by the embattled global health body to reset its approach to determining how the pandemic began. Nine months after sending a team of international experts to China, only for its findings to become entangled in geopolitics and trailed by concerns over Beijing's influence, the WHO is trying to inoculate its latest efforts from the slightest hints of undue deference toward China.

Its new advisory team will include specialists in fields like laboratory safety and biosecurity, a step that analysts say may help placate Western governments pressing for consideration of whether the virus emerged from a lab. And, crucially, the committee will have a mandate to weigh in on the emergence of any new pathogens beyond this novel coronavirus, giving it a permanence that could help insulate it from political squabbling and strengthen the WHO's hand for future outbreaks.

Maria Van Kerkhove, the WHO's COVID-19 technical lead, said the group — comprising some two dozen virologists, geneticists, animal experts and safety and security specialists — would help the organization return to its roots amid the rancor and partisanship of the coronavirus origins debate.

"Especially in light of the politicization of this particular aspect," she said, "we want to take this back to the science, take this back to our mandate as an organization to bring together the world's best minds to outline what needs to be done."

What most needs doing in the hunt for COVID-19's origins, many scientists believe, is something that the new advisory group will be powerless to achieve: persuading China to release evidence about the first infections and to let researchers inspect virology labs, bat caves and wildlife farms within its borders.

China has reacted angrily to the idea that the virus may have emerged from a lab, pushing instead for investigations into early cases in other countries, like Italy, or into U.S. research facilities.

Even as China has resisted deeper studies of the virus' origins, the Biden administration has pressed the WHO for a renewed investigation. The Department of State pointedly questioned the results of a joint study by the WHO-chosen scientists and Chinese researchers from March that said a leak of the coronavirus from a lab, while possible, was "extremely unlikely."

That WHO team, too, struggled to coax the data it needed from Chinese scientists. Members of the team, which has been disbanded, warned in August that time was running out to recover crucial evidence about the beginning of the pandemic. But it is unclear whether China has taken up the team's recommendations for future

studies, including analyzing blood banks for evidence of early coronavirus infections, testing workers on wildlife farms and assessing wild bats and farmed animals for signs of exposure.

Some scientists have said that studies of Chinese animal markets, and of bats harboring close relatives of the virus behind COVID-19, have strengthened their belief that the coronavirus spilled naturally from animals into humans.

The WHO has said that Chinese researchers were conducting new studies but that it had not been kept abreast of any findings. "I don't have any detail on what was done, or is being done," Van Kerkhove said of the Chinese research.

President Xi Jinping said last month that China would support "science-based origins tracing," but would oppose "political maneuvering in whatever form."

The new committee, known as the Scientific Advisory Group for the Origins of Novel Pathogens, will differ in several respects from the team that the WHO sent to China. Because that team visited Wuhan, China had considerable influence over its membership. That is not the case for the new committee, a permanent panel that Van Kerkhove said would begin with frequent, closed-door meetings on the coronavirus.

In soliciting applications, the WHO asked potential committee members for a statement about any conflicts of interest, in addition to a cover letter and résumé. That appeared to be an attempt to head off critics who complained that a member of the previous team, Peter Daszak, an animal disease specialist, was too closely tied to a Wuhan virology institute at the center of lab leak theories to offer a dispassionate assessment. Daszak has said that his expertise on China and coronaviruses made him well-suited to participate in the earlier trip.

"Conflicts of interest of members of the last group put a huge cloud over the head of the World Health Organization," said Lawrence Gostin, who directs the O'Neill Institute for National and Global Health Law at Georgetown University. Of the new advisory group, he added: "It's a committee with a proper charge, and a proper global mandate — none of that happened before."

For the WHO, Gostin said, the new committee serves several purposes. In choosing a larger group reflecting a wider range of expertise and geographic regions, the organization can try to amass widespread international support for its work and underscore China's intransigence, he said.

Crucially, forming the new group could also help shore up the WHO's standing with its key Western backers, none more important than the U.S. Despite the agency's attempt to act deferentially toward China during the pandemic, Gostin said, China had repeatedly stonewalled the organization and concealed crucial information.

Now, he said, the organization needed to pay heed to the desires of Europe and the U.S. — not least because Tedros Adhanom Ghebreyesus, the WHO director-general, is counting on their support as he seeks reelection in May.

Despite the eventual avalanche of applications, recruiting for the new committee was no simple task. In some cases, scientists rebuffed the WHO's pleas to apply.

"We did have some people say to us, 'No, we really don't want to get engaged, because it's just too politicized,'" Van Kerkhove said.

This article originally appeared in The New York Times.

The Indian EXPRESS

Panel approval is in, Covaxin for children is one step away

Bharat Biotech is also expecting a decision soon on its separate application for EUA of Covaxin in adults from WHO.

Written by **Kaunain Sheriff M** | New Delhi |
Updated: October 13, 2021 2:21:46 am

The development is significant as India is just one step away from a Covid-19 vaccine being formally approved for children above the age of 2 years. (Express photo: Deepak Joshi)

THE DECKS are being cleared for children to be included in India's Covid vaccination drive with the Government's Subject Expert Committee (SEC) Tuesday recommending the grant of Emergency Use Authorisation (EUA) for Bharat Biotech's Covaxin in the **age group of 2-18 years**.

The SEC's recommendation to the Drug Controller General of India (DGCI) means that India is just one step away from formally clearing the vaccine for children. Sources told The Indian Express that the DGCI is expected to approve the SEC's recommendation soon, potentially bringing an additional 25 crore beneficiaries under the vaccination umbrella.

Bharat Biotech is also expecting a decision soon on its separate application for EUA of Covaxin in adults from WHO.

Globally, the SEC's green signal is the first by an expert panel of a national regulator for the 2-18 age group. On October 26, the US expert panel is expected to discuss a request from pharma giant Pfizer for EUA of its Covid vaccine in the age group of 5-12 years in that country.

So far, India has **approved Zydus Cadila's vaccine for children aged above 12 years**. Pfizer's double dose has been recommended for 12 years and above in the US, and a single dose for the same age level in the UK. Moderna's vaccine has also been approved by the UK regulator for those above 12 years old.

Welcoming the SEC clearance, Hyderabad-based Bharat Biotech said: "This represents one of the first approvals worldwide for Covid-19 vaccines for the 2-18 age group... We now await further regulatory approvals from the CDSCO (Central Drugs Standard Control Organisation) prior to product launch and market availability of Covaxin for children."

The SEC decision will have significant public health implications, with schools and colleges reopening in a phased manner across the country. Once the DGCI shows the green flag, the next key decision would be to identify priority categories among those in the 2-18 age group, such as those with comorbidities.

"Since this is happening for the first time, there is a possibility that certain conditions would be imposed by the drug regulator when it grants the EUA. There could be a mandate that the vaccination should take place only in health facilities or under a certain level of supervision," sources said.

Once the formal EUA approval is granted, the high-powered National Expert Group on Vaccine Administration for Covid-19 (NEGVEC)

"will take a final call on which category of children will be prioritised for vaccination", sources said.

The Indian Express reported on October 4 that the final call on Covid vaccination of children, including guidelines on the categories to be prioritised as well as the timeline, would be taken in the first half of this month.

India has administered a cumulative 96.33 crore doses of Covid vaccines across the country, and is expected to touch the landmark of 100 crore in the next few days. According to official data, 73 per cent of the estimated adult population has received the first dose while 29 per cent is fully vaccinated.

According to the data, over 11.08 crore cumulative doses of Covaxin have been administered so far across the country. However, Bharat Biotech is yet to receive an EUA from the WHO, which would enable Covaxin beneficiaries to travel abroad without strict restrictions.

Sources in the company said they expect a final decision by WHO "in the next few days". They said the world body's Strategic Advisory Group (SAGE) has completed its evaluation, and that another expert group will take it up in a meeting soon to examine technical aspects.

The SAGE on immunization held a meeting from October 4-7, and reviewed Covaxin on October 5. During the review, Bharat Biotech made a presentation for about 30 minutes on safety and efficacy data from clinical trial results as well as after marketing. In its highlights from the meeting, SAGE stated that "a policy recommendation will be issued when the vaccine is Emergency Use listed by WHO".

The Indian EXPRESS

If you've had Covid-19, do you need the vaccine?

While many people who have recovered from Covid-19 may emerge relatively unscathed from a second encounter with the virus, the strength and durability of their immunity depends on their age, health status and severity of initial infection.

By: **New York Times** |
October 12, 2021 1:37:51 pm

A 78-year-old man receives a booster shot at Bay Eden Senior Center in the Bronx on Monday, Sept. 27, 2021.(Dave Sanders/The New York Times)

Written by Apoorva Mandavilli

When Jonathan Isaac, a basketball player for the Orlando Magic, explained why he chose not to be vaccinated against the coronavirus, he tapped into a dispute that has been simmering for months: Do people who have had COVID-19, as Isaac said he has, really need the vaccine?

That question has thrust tortuous immunological concepts into a national debate on vaccine mandates, with politicians, athletes, law professors and psychiatrists weighing in on the relative strength of so-called natural immunity versus the protection afforded by vaccines.

But the answer, like nearly everything about the virus, is complicated.

While many people who have recovered from Covid-19 may emerge relatively unscathed from a second encounter with the virus, the strength and durability of their immunity depends on their age, health status and severity of initial infection.

"That's the thing with natural infection — you can be on the very low end of that or very high end, depending on what kind of disease you developed," said Akiko Iwasaki, an immunologist at Yale University.

Those with powerful natural immunity may be protected from reinfection for up to a year. But even they should not skip the vaccine, experts said. For starters, boosting their immunity with a vaccine is likely to give them long-lasting protection against all the variants.

"If you've gotten the infection and then you've been vaccinated, you've got superpowers," said Jennifer Gommerman, an immunologist at the University of Toronto.

Without that boost, antibodies from an infection will wane, leaving COVID-recovered people vulnerable to reinfection and mild illness with variants — and perhaps liable to spread the virus to others.

This is the same argument for giving boosters to people who are fully vaccinated, said Michel Nussenzweig, an immunologist at Rockefeller University in New York. "After a certain period of time, you're either going to get boosted or you're going to get infected," he said.

How immunity from infection and from vaccination compare is difficult to parse. Dozens of studies have delved into the debate, and have drawn contradictory conclusions.

Some consistent patterns have emerged: Two doses of an mRNA vaccine produce more antibodies, and more reliably, than an infection with the coronavirus does. But the antibodies from prior infection are more diverse, capable of fending off a wider range of variants, than those produced by vaccines.

Studies touting the durability and strength of natural immunity are hobbled by one crucial flaw. They are, by definition, assessing the responses only of people who survived COVID-19. The road to natural immunity is perilous and uncertain, Nussenzweig said.

Only 85% to 90% of people who test positive for the virus and recover have detectable antibodies to begin with. The strength and durability of the response is variable.

For example, while the immunity gained from vaccines and infection is comparable among younger people, two doses of the mRNA vaccines protected adults older than 65 better than a prior infection did.

Research published by Iwasaki's team in May showed a stepwise increase in the level of antibodies with rising severity of infection. About 43% of recovered people had no detectable neutralizing antibodies — the kind needed to prevent reinfection — according to one study. The antibodies drop to undetectable levels after about two months in about 30% of people who recover.

Other researchers may find different results depending on the severity of illness in the participants, said Fikadu Tafesse, an immunologist at Oregon Health & Science University.

"If your cohort is just only hospitalized individuals, I think the chance of having a detectable antibody is higher," Tafesse said.

In terms of the quality of the antibodies, it makes sense that invasion by a live virus would produce a broader immune response than would

injecting the single protein encoded in the vaccines, he and others said.

The virus would stimulate defenses in the nose and throat — exactly where they are needed to prevent a second infection — while the vaccines produce antibodies mainly in the blood.

"That will give you an edge in terms of resisting a subsequent infection," Gommerman said.

Fragments of the virus may also persist in the body for weeks after infection, which gives the immune system more time to learn to fight it, while the proteins carried by the vaccine quickly exit the body.

Several studies have now shown that reinfections, at least with the earlier versions of the virus, are rare.

At the Cleveland Clinic, none of 1,359 health care workers who remained unvaccinated after having COVID-19 tested positive for the virus over many months, noted Dr. Nabin Shrestha, an infectious disease physician at the clinic.

But the findings must be interpreted with caution, he acknowledged. The clinic tested only people who were visibly ill, and may have missed reinfections that did not produce symptoms. The participants were 39 years old on average, so the results may not apply to older adults, who would be more likely to become infected again.

Most studies have also tracked people for only about a year, Shrestha noted. "The important question is, how long does it protect, because we're not under any illusions that this will be a lifelong protection," he said.

It's also unclear how well immunity after infection protects against the newer variants. Most studies ended before the delta variant became dominant, and more recent research is patchy.

The most widely cited study in favor of natural immunity's potency against the delta variant comes from Israel.

Breakthrough infections after vaccination were 13-fold more likely than reinfections in unvaccinated people, and symptomatic breakthrough infections 27-fold more likely than symptomatic reinfections, the study found.

But experts cautioned against inferring from the results that natural immunity is superior to the protection from vaccines. The vaccinated group included many more people with conditions that would weaken their immune response, and they would be expected to have more breakthrough infections, noted Bill Hanage, an epidemiologist at the Harvard T.H. Chan School of Public Health.

The study also did not account for people whose immune defenses may have been strengthened by a second exposure to the virus.

For those lucky enough to have recovered from COVID-19, vaccination is still the ideal choice, experts said. It provides a significant boost in antibody levels and a near-impenetrable immune shield — perhaps even against future variants.

"They are like rock stars on all the variants," said Dr. Duane Wesemann, an immunologist at Harvard Medical School.

Colorful graphs from Wesemann's recent paper have been helpful for convincing COVID-recovered patients of the stark advantage even a single dose would offer them, he said.

Regardless of the evolving understanding of natural immunity, on one point there is near-universal agreement among scientists. For people who were never infected, vaccines are much safer, and far less a gamble, than COVID-19.

Many people who argue against vaccines cite the low mortality rates from COVID-19 among young people. But even seemingly mild cases of COVID-19 can result in long-term damage to the heart, kidneys and brain, or leave people feeling exhausted and unwell for weeks to months, Iwasaki said.

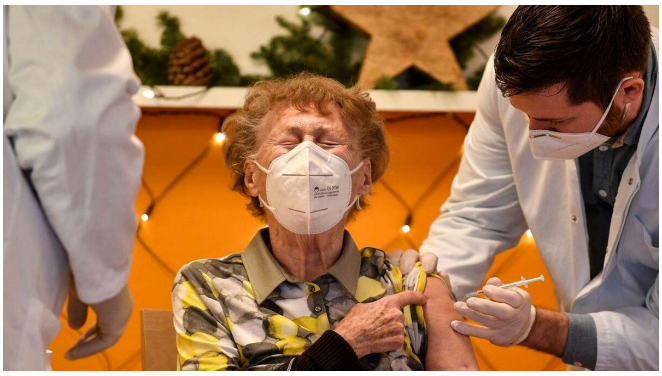
"No one should try to acquire immunity through natural infection," she said. "It's just too dangerous."

The Indian EXPRESS

Vaccine reduces severe Covid-19 risks by 90%, finds French study

The French study, which tracked over 22 million people, found that the results were the same regardless of the vaccine used.

By: Express Web Desk |
October 12, 2021 1:09:34 pm



An elderly woman gets coronavirus vaccine. (File photo via AP for representation)

Covid vaccinations can reduce severe risks associated with the infection by 90% in those over 50 years of age, according to a new French study. One of the largest of its kind, the study looked into data of over 22 million people in the 50+ category to reach its conclusions.

The research was conducted by the Epi-Phare Scientific Interest Group which was set up by the French National Health Data System (SNDS), the French National Agency for the Safety of Medicines and Health Products (ANSM) and the French National Health Insurance (CNAM). The results of this study is an additional stamp of approval on observations from the United States, the United Kingdom and Israel.

To evaluate the efficacy of the vaccine, the researchers used data of 22.6 million people of which 15.4 million were between the ages of 50 and 74 years and the other 7.2 million were above 75 years of age. Half of both these groups were vaccinated while the other half was unvaccinated. Researchers paired an unvaccinated person with a vaccinated person of same sex and age and the same region, and followed them between the vaccinated person's date of second jab and July 20, according to an AFP report. Broadly, the subjects were tracked from Dec 27, 2020 and July 20, 2021.

rance kicked off its vaccination program in Dec 2020.

The study found a "reduction in risk of hospitalisation superior to 90%" 14 days after the second dose and a similar reduction in the number of deaths from Covid-19. The vaccinated group comprised those who took Pfizer, Moderna, or AstraZeneca vaccines. The study found that the results were the same regardless of the vaccine used. Johnson & Johnson's single-dose Jannsen vaccine, which was approved in France in March 2021, was not included in the study.

The results hold true for the highly infectious Delta variant as well. The study found that vaccines provide 84 per cent protection for those aged 75 and above, and 92 per cent protection for those in the 50 to 75 years old category. However, since delta became active in France in June

2021, these conclusions have been made on a single month's data.

Epidemiologist Mahmoud Zureik, the head of Epi-Phare, told AFP that the study should be followed up to include results from August and September.

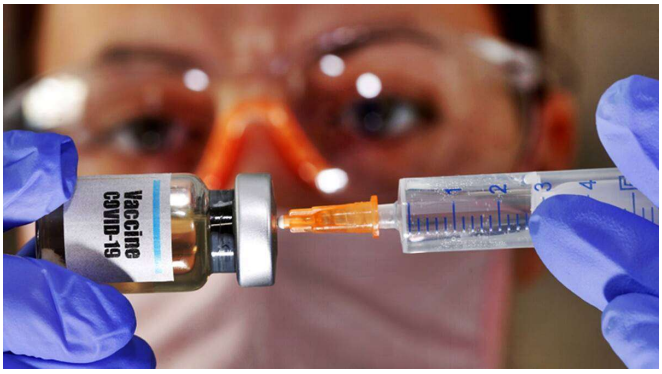
The AFP report added that the study's results suggest that vaccination protection against severe Covid did not diminish over the five months it was conducted.

The Indian EXPRESS

WHO advises additional Covid shot for immunocompromised people

The panel also recommended that people over 60 receive an additional dose of the shots made by Chinese vaccine makers Sinopharm and Sinovac some one to three months after completing their schedule

By: **Reuters** | Geneva |
October 11, 2021 10:09:14 pm



Currently, some 3.5 billion doses of Covid-19 vaccines have been administered. (File)

The World Health Organization on Monday recommended that immunocompromised people be given an additional dose of the Covid-19 vaccine, due to their higher risk of breakthrough infections after standard immunisation.

The Strategic Advisory Group of Experts on immunisation said the additional dose should be offered "as part of an extended primary series since these individuals are less likely to respond adequately to vaccination following a standard primary vaccine series and are at high risk of severe Covid-19 disease".

WHO vaccine director Kate O'Brien, referring to people with lower immunity due to other conditions, told a news briefing: "The recommendation is for a third vaccination, an additional vaccination in the primary series and again that is based on the evidence showing that the immunogenicity and evidence on breakthrough infections is highly disproportionately represented by those people."

The panel also recommended that people over 60 receive an additional dose of the shots made by Chinese vaccine makers Sinopharm and Sinovac some one to three months after completing their schedule, citing evidence in studies in Latin America that they perform less well over time.

Observational data on Sinopharm and Sinovac shots "clearly showed that in older age groups … the vaccine performs less well after two doses", said Joachim Hombach, secretary of the independent panel of experts who held a five-day closed-door meeting last week.

"We also know that the addition of a third dose or moving into a two-plus-one schedule provides a strong (immune) response. So we expect from there a much better protection," he said.

Health authorities using the Sinopharm and Sinovac vaccines should aim first to maximise two-dose coverage in the older populations and then administer the third dose, the panel said.

The SAGE group, composed of independent experts who make policy but not regulatory recommendations, will review all global data on booster shots in a Nov. 11 meeting, amid questions over variants and potential waning of immunity, O'Brien said.

Currently, some 3.5 billion doses of Covid-19 vaccines have been administered, O'Brien said.

An estimated 1.5 billion doses are available globally each month, enough to meet the target of vaccinating 40 per cent of each country's population by year-end, but distribution is unequal, she added.

"Giving those booster doses to individuals who have already had the benefit of a primary response is like putting two life jackets on somebody and leaving others without any lifejacket," O'Brien said.

"In this sense we are talking about getting the first lifejacket onto people who have immunocompromising conditions."

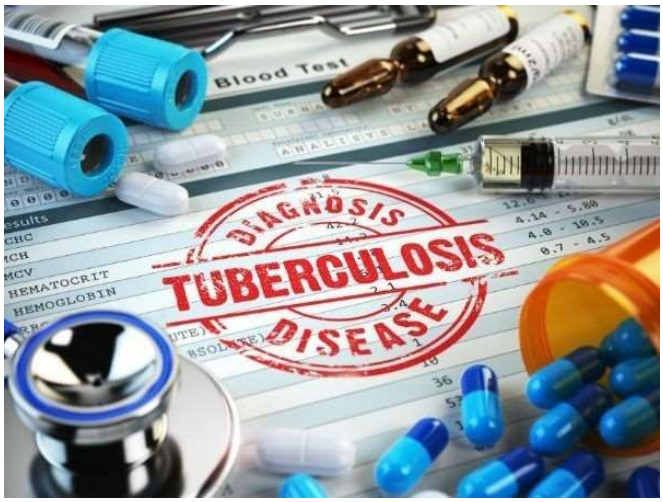
TIMESNOWNEWS.COM

Tuberculosis outbreaks declared in Canadian province, two resistant strains found: Why is Canada on alert over TB?

Kirti Pandey
Updated Oct 18, 2021 | 17:26 IST

Disease outbreak declared in Canada as two new variants of deadly Tuberculosis found. Health officials in Canada have declared a TB High-alert in northern Saskatchewan. How serious is the issue?

With 13 Tuberculosis cases having been detected, officials in Canada have declared an outbreak of tuberculosis in northern Saskatchewan province. So far, there have been seven confirmed cases in Fond Du Lac, with about 70 contacts identified, and six confirmed cases in Black Lake, with 157 contacts identified.



According to the CBC.CA, the total number of cases that has sent Canadian authorities in a tizzy is a combined count of 13 cases and hundreds of close contacts. Tuberculosis is a respiratory disease that is spread through bacterial infections. When/if one does contract it, treatment should be disciplined, persistent, and under the doctor's watch.

According to Express.co.uk, at least 20 people were receiving treatment for the disease as of October 8, according to Primary Health Care in Canada. The Athabasca Health Authority (AHA) has now declared a tuberculosis outbreak. Cases of the bacterial outbreak were reported in the Black Lake and Fond Du Lac communities, reports Express.co.uk.

News of the outbreak follows scientists identifying two new variants of bovine tuberculosis in Dordogne, France.

With 13 cases, why should Canada be so excessively worried, one may ask.

As per a paper published by the Official Publication of the College of Family Physicians of Canada, "With a national rate of approximately 4.6 cases per 100 000 population, Canada is fortunate to have one of the lowest rates of TB in the world. The highest-risk groups for TB in Canada are indigenous populations and immigrants from endemic countries. But there are other risk groups too. In a recent 13-year outbreak, TB spread through a network of inner-city substance users who were largely homeless, many of whom were also HIV-positive. It appeared that crack houses might have been a site of transmission," notes the report.

The paper also notes the sad fact that mankind, despite having a successful vaccine for this horrific disease, has failed to eradicate it. "It is true that both Dickens and Dostoyevsky described the ravages of TB in novels written at the end of the 19th century. The BCG (bacillus Calmette-Guérin) vaccine was developed in 1906, streptomycin was first used to treat TB in 1944, and isoniazid has been a mainstay of treatment since the 1950s. Yet more than 60 years later, an estimated 10 million people developed active TB in 2015 and it remains in the top 10 causes of death worldwide," it notes.

Canada worries over 13 cases, India has millions!
While India finds itself to be one of the regions of the world where Tuberculosis (TB) or Koch's disease has percolated so deep within the population of nearly 1.4 billion citizens that it will need serious surveillance, clinical assessment, testing, contact tracing, confirmation of diagnosis with supervised or in-supervised treatment regimens for effective eradication. Sadly, the COVID- 19 pandemic has created serious challenges to the management of Tuberculosis and current strategies adopted to mitigate them.

The World Health Organisation (WHO) TB statistics for India for 2019 (the latest available) give an estimated incidence figure of 2.64 million cases.

According to a report in the Down To Earth magazine that cites the World Health Organisation,

India continues at the top of the list of patients with tuberculosis (WHO report released on October 17, 2019). It also had the greatest number of drug-resistant TB cases, says Down To Earth.

The WHO report is said to have estimated that 10 million people in the world had TB in 2018. India accounted for 27 per cent of the world total. China was a distant second with 9 per cent, Indonesia (8 per cent), the Philippines (6 per cent), Pakistan (6 per cent), Nigeria (4 per cent), Bangladesh (4 per cent) and South Africa (3 per cent). Incidentally, these countries also had most of the global TB burden a year ago.

India also had 27 per cent of a total 130,000 drug-resistant TB cases while China had 14 per cent and the Russian Federation 9 per cent, reports Down To Earth.

FINANCIAL TIMES

WHO warns progress on tuberculosis being undone by Covid pandemic

Donato Paolo Mancini in London
OCTOBER 14 2021

Deaths from TB increase for first time in over a decade despite confirmed cases falling

The coronavirus pandemic has erased years of progress in tackling tuberculosis, leading to the

first increase in deaths caused by the disease in more than a decade despite the number of registered cases decreasing, the World Health Organization has warned in a report. Tedros Adhanom Ghebreyesus, the WHO's director-general, said the findings released by the health body on Thursday were "alarming". He added that they should "serve as a global wake-up call to the urgent need for investments and innovation . . . in diagnosis, treatment and care" for the millions of people affected by the disease. Tuberculosis is caused by bacteria that most frequently affects the lungs. It can spread by coughing. But it is both preventable and curable, with about 85 per cent of those who develop the disease successfully treated with a six-month drug regimen that also curtails the potential of onward transmission. Yet the WHO said that in 2020 more people died from tuberculosis, with "far fewer" people diagnosed and treated, or provided with preventive treatment than in 2019. In many countries, resources once deployed against TB were reallocated to Covid-19. Patients had also struggled to seek care during lockdowns, the WHO said. It estimated that about 1.5m people had died from TB in 2020, up from an estimated 1.4m the year prior. Meanwhile, the number of new tuberculosis diagnoses fell from 7.1m in 2019 to 5.8m in 2020. The increase in the number of deaths caused by the curable disease occurred mainly in the 30 nations with the highest TB burden and the WHO estimated that the number of deaths could be "much higher" in 2021 and 2022. "This report confirms our fears that the disruption of essential health services due to the pandemic could start to unravel years of progress against tuberculosis," said Tedros. Tuberculosis is not the only disease whose management has been affected by the pandemic. Health officials and pharma executives have warned for months that patients with cancer and other conditions have experienced underdiagnosis, with the full effects of the phenomenon unlikely to be clear for years to come.

According to the WHO, about 4.1m people globally have TB but have not been diagnosed, or their cases have not been officially reported to health authorities. This is an increase from 2.9m in 2019. Approximately 2.8m people accessed preventive treatment in 2020 — a reduction of about a fifth since 2019. Only one in three were treated for drug-resistant disease. Global funding to tackle TB had fallen and was less than half of the $13bn a year global target by 2022, said the WHO. It warned that targets to tackle the disease worldwide, including aiming to reduce deaths by 90 per cent by 2030 compared with 2015 baseline figures, were "off track" and "increasingly out of reach". Progress in tuberculosis drugs, vaccines and tests has been constrained by the relatively low level of underlying research and development investment, which at about $900m in 2019 falls "far short" of the global target of $2bn a year.

The New York Times

Deaths from tuberculosis rose in 2020, for the first time in a decade, the W.H.O. says.

A baby is vaccinated against tuberculosis, polio and measles in the village of Tanarake, Madagascar, in September.Credit...Rijasolo/Agence France-Presse — Getty Images

By Apoorva Mandavilli
Oct. 14, 2021

Deaths from tuberculosis, the world's biggest infectious disease killer until the Covid-19 pandemic arrived, have increased for the first time in more than a decade, totaling more than 1.5 million people in 2020. That trend is expected to worsen in 2021 and 2022, according to a report released on Thursday by the World Health Organization.

The report confirmed the warnings from the W.H.O. and other global health organizations that the Covid-19 pandemic would reverse years of progress against other infectious diseases, including TB, H.I.V. and malaria.

"This is alarming news that must serve as a global wake-up call to the urgent need for investments and innovation to close the gaps in diagnosis, treatment and care for the millions of people affected by this ancient but preventable and treatable disease," Dr. Tedros Adhanom Ghebreyesus, the W.H.O.'s director general, said in a statement.

Reported diagnoses of TB also dropped sharply, to 5.8 million cases in 2020 from 7.1 million in 2019, suggesting that many more cases than before are going undiagnosed and untreated — a trend that is likely to have a long-term effect on TB deaths. And only 2.8 million people were given preventive treatment for TB in 2020, a 21 percent decrease from 2019.

In many poor countries, health care workers, funds and testing equipment that would normally be dedicated to TB were redirected to cope with Covid-19, according to the W.H.O. report. Lockdowns and disruptions in supply chains also interrupted access to treatment and care.

At the same time, global funding for TB has fallen to $5.3 billion from $5.8 billion, less than half of what's needed, according to the W.H.O. report.

There were some glimmers of good news amid the sobering statistics. In the Russian Federation, the incidence of TB fell by 6 percent a year between 2010 and 2020, and the W.H.O. European Region overall exceeded the 2020 goal with a decrease of 25 percent.

Also read: NDTV: https://www.ndtv.com/world-news/tuberculosis-deaths-on-rise-again-globally-due-to-covid-19-who-2575568

(ii) UN News:
https://news.un.org/en/story/2021/10/1103022

(iii) US NEWS:
https://www.usnews.com/news/health-news/articles/2021-10-14/tuberculosis-deaths-rise-for-1st-time-in-years-due-to-covid

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

EndTB clinical trial for multidrug-resistant TB completes enrolment

Press Release | 18 October 2021

BOSTON/PARIS — Hundreds of patient volunteers from four continents have enrolled in a trial that aims to find safer, shorter, and effective treatments for multidrug-resistant tuberculosis (MDR-TB), an airborne, infectious disease that has grown resistant to standard medications. A group of scientists and clinicians led by Médecins Sans Frontières (MSF), Partners In Health (PIH) and Interactive Research and Development (IRD) make up the endTB consortium conducting the groundbreaking study funded by Unitaid.

Started in 2017, this phase III randomised, controlled trial recruited 750 patients with MDR-TB across seven countries: Georgia, India, Kazakhstan, Lesotho, Pakistan, Peru, and South Africa. The trial compares five new treatment regimens for treating MDR-TB containing two of the three new TB drugs developed in recent years, bedaquiline and delamanid, in combination with other existing oral TB drugs. This new generation of drugs, which were developed after a nearly 50-year drought in new anti-TB drug classes, now allows for the development of

radically shorter (6 or 9 months versus as long as two years), more tolerable, injection-free treatments for MDR-TB.

"An old enemy of mankind, tuberculosis remains the deadliest infectious disease today. And MDR-TB is the most cruel and merciless version," says Dr Lorenzo Guglielmetti, endTB Project Leader for MSF and co-principal investigator of the trial. "The coming results of this trial could be lifechanging for more than 500,000 people suffering from MDR-TB, and may help to appropriately treat millions of patients, tomorrow and in decades to come."

The results, which will be available in 2023, will be relevant to a wide range of patients living with MDR-TB. This is because of the diversity in the study population: while all patients were sick with TB resistant to standard treatment, the study population included people from a range of racial and ethnic backgrounds. It also included people affected by comorbidities that occur commonly with MDR-TB like HIV, hepatitis C or diabetes. People with these conditions are often excluded from TB trials making it difficult for doctors to know how best to treat their patients.

"With sobering new data from the Global TB Report showing progress against TB slipping backwards for the first time in over a decade, new tools and treatments are more crucial than ever," said Dr Philippe Duneton, Executive Director of Unitaid. "The innovative multi-country endTB trial will benefit not only people with MDR-TB – a more complex and difficult to cure strain of TB – but it is also building long-term capacity in the countries that are managing this multi-faceted clinical trial."

Other reasons explain why this trial stands out.

First, the trial is innovative. Regulatory bodies had approved the individual medications – the first new drugs for tuberculosis in 50 years – but how to optimally combine these drugs was unknown. Rather than testing different drug regimens sequentially over a decade or longer, partners applied adaptive randomisation, maximising the number of patients who get well performing experimental regimens. This allows for a relatively small sample size (750), requires fewer resources, and may enable dramatic improvements in treatment over short periods of time.

Second, enrolment is designed to benefit all. endTB enrolled women and adolescents – groups that are often left out of clinical trials in an effort to protect them – to be sure that doctors have the data they need to best to care for them. The consortium helped train staff at clinical sites, thus enabling more research, faster recommendations, and better treatments in the future.

Lastly, it's significant that enrolment was completed despite massive constraints related to the COVID-19 pandemic. The COVID-19 pandemic has paused hundreds of clinical trials. Universities, hospitals, labs, and others have been forced to stall or cancel research into illnesses ranging from cancer to rare diseases. Instead, the endTB consortium adapted and continued.

This clinical trial is part of the larger endTB project that was launched to revolutionise treatment for MDR-TB patients. Approximately 2,800 patients from 17 countries were enrolled in an observational study that produced strong evidence of the effectiveness of new drugs (85 per cent culture conversion in the first six months of treatment) and further supports a rapid increase in access to these drugs. A second randomised controlled trial, called endTB-Q, is underway to study a 6-9 month regimen to treat the most resistant form of MDR-TB.

In addition, the endTB trial complements the TB-PRACTECAL clinical trial, also sponsored by MSF, which include another newer drug called pretomanid to provide high-quality evidence on

shorter, all-oral regimens. Ultimately, both trials address the critical need for increased treatment options – and access – for the approximately 500,000 people who fall sick each year with MDR-TB.

SO: https://www.msf.org/patients-across-four-continents-enrol-multidrug-resistant-tuberculosis-trial

The Telegraph online

Tuberculosis killed 504,000 people in India in 2020: WHO

Pulmonary medicine specialists in India have cautioned over the past year that Covid-19 is likely to derail India's efforts to eliminate TB by 2025

Shutterstock

G.S. Mudur | Published 15.10.21, 03:00 AM

Tuberculosis killed 504,000 people in India in 2020, a 13 per cent increase over the previous year, the World Health Organisation said in a report released on Thursday, flagging a global reversal of progress on TB.

India accounted for about 34 per cent of the estimated global 1.5 million tuberculosis deaths in 2020, the health agency said in its annual global TB report that has outlined how Covid-19 disrupted access to TB services in countries around the world.

"This report confirms our fears that the disruption of essential health services due to the pandemic could start to unravel years of progress against tuberculosis," WHO director-general Tedros Adhanom Ghebreyesus said in a statement.

The number of people expected to develop and die from TB during 2021 and 2022 is expected to be even higher, the WHO said, citing model-based forecasts of how disruptions in diagnostic and treatment services in 2020 could impact future counts.

Twelve countries accounted for 93 per cent of the global reduction in registered TB cases between 2019 and 2020 with India making up 41 per cent of the global drop in notifications followed by Indonesia (14 per cent), the Philippines (12 per cent) and China (8 per cent).

The WHO report said the number of people worldwide treated for drug-resistant TB fell by 15 per cent from 177,000 in 2019 to 150,000 in 2020, or equivalent to only one in three of those in need of treatment.

In India, 42,505 drug-resistant TB patients were started on treatment during 2020, although it is estimated that around 124,000 patients were diagnosed as drug-resistant in the country during 2019

Health experts say the difference between those numbers — the estimated drug-resistant patients diagnosed in 2019 and those who actually received treatment in 2020 — exposes the gaps in treatment services available to patients in India.

The WHO report calls on countries to put in place urgent measures to restore access to essential TB services, double investments in research and innovation and address social and economic factors that influence tuberculosis and its consequences.

Lucica Ditiu, executive director of Stop TB Partnership, an international organisation, said: "The Covid-19 pandemic combined with low political will and appallingly low levels of funding have reversed hard-fought gains in the fight against this age-old disease."

"People are dying because we are failing to empower and support them and failing to ensure they have access to preventive therapy, diagnosis tools and treatments they need," she said in a statement. "We are running out of time… we need speed, money, commitment today if we want to make a dent in the TB epidemic."

An already under-funded TB response saw a dramatic fall in domestic funding across low- and middle-income countries during 2020 with less than half of the global target of $13 billion annual funding by 2022 available, Stop TB Partnership said in a statement.

Pulmonary medicine specialists in India have cautioned over the past year that Covid-19 is likely to derail India's efforts to eliminate TB by 2025. The TB elimination target seeks to reduce India's tuberculosis deaths from 32 per 100,000 people in 2015 to below 3 by 2025.

THE NEW INDIAN EXPRESS

86% success rate in tuberculosis treatment in TN: Report

In Tamil Nadu, the success rate of TB treatment is 86 percent. All the presumptive and registered TB cases are screened for HIV and vice versa, the release added.

Published: 12th October 2021 05:39 AM

By Express News Service

CHENNAI: As many as 465 patients, out of the 42,797 individuals screened for Tuberculosis (TB) in the last three months across the State, tested positive for the infection, according to a government press release.

In Tamil Nadu, the success rate of TB treatment is 86 percent. All the presumptive and registered TB cases are screened for HIV and vice versa, the release added. The findings were in a report submitted to Health Minister Ma Subramanian on Monday by the Joint Supportive Supervision Mission team from the Central Tuberculosis Division after surveying the State TB elimination activities in Tiruvallur for three days.

National Professional Officer of WHO Dr Ranjani Ramachandran, along with the State TB Officer Dr Asha Frederick, explained the report to the health minister. Active cases finding is being done on the field to identify TB patients in communities. Mobile X-ray vans are also used for the activity.

Medicine given

Officials said all TB patients were given medicines at their doorstep during the lockdown. 39,222 TB patients were given medicines during the lockdown through the staff of Nat'l TB elimination mission

Cureus

A Rare Case of Sternoclavicular Tuberculosis Diagnosed Using Microchip-Based Polymerase Chain Reaction in a Diabetic Female

Subodh Kumar, Aroop Mohanty, Vivek Hada, Devesh P. Singh, Garima Kushwaha

Published: October 17, 2021
DOI: 10.7759/cureus.18845

Abstract

Osteoarticular tuberculosis (TB) accounts for almost 10% of all extrapulmonary TB cases. In the majority of cases, the spine, knee, hip, and large bones are involved; other sites like the sternoclavicular joint, elbow, wrist, and smaller joints are infrequently involved. Uncommon locations of extrapulmonary TB pose a challenge in diagnosis due to lack of clinical suspicion, non-availability of samples, and unavailability of suitable diagnostic modalities. Here we report a case of uncommon location of osteoarticular TB diagnosed through microchip-based real-time polymerase chain reaction (PCR).

Introduction

India has set itself an ambitious target for eliminating tuberculosis (TB) by the year 2025, five years earlier than the global target [1]. The modalities for the diagnosis of TB have changed drastically with the recent availability of molecular tests for routine diagnosis. The availability of various molecular testing platforms like GeneXpert, TrueNat, etc. is revolutionizing TB diagnostics and control programs [2]. Here we report a case of uncommon location of osteoarticular TB diagnosed using Truenat MTB.

Case Presentation

A 55-year-old female patient, with a history of treated pulmonary sarcoidosis, visited the Pulmonary Medicine outpatient department with complaints of fever and painful swelling in the lower part of the left side of the neck for two weeks. The swelling was insidious in onset and was gradually increasing in size. It was associated with pain, which was dull in nature and mild in intensity. The pain was aggravated with the movement of the neck and relieved with pain killers. The patient was suffering from steroid-induced diabetes mellitus, which was controlled on oral hypoglycemic agents.

On examination, she was febrile; pulse rate was 80 beats/min, respiratory rate was 22/min; blood pressure was 136/76mmHg; and oxygen saturation was 97% while breathing on room air. On local examination, there was a visible erythematous swelling of approximately 5 x 4 cm over the left sternoclavicular region. It was non-fluctuant and tender on palpation. There was no associated swelling present in the cervical and axillary areas. Auscultation of the chest revealed normal breath sounds without any crepitations. Rest systemic examination was normal. Routine laboratory investigations were performed and were found to be within normal limits.

Further, chest radiography was done that came out to be normal. In order to evaluate the swelling, a contrast-enhanced computerized tomography (CECT) thorax was performed. It revealed an inhomogeneous lesion involving the left sternoclavicular joint and adjacent first rib soft tissue component and mild fluid (Figure *1A*). A USG-guided aspiration was performed from the swelling, but it was a dry tap. The minimal aspirate collected was sent for cytopathological examination and the patient was started on a broad-spectrum antibiotic (tablet amoxicillin/clavulanic acid 625 mg TDS) for seven days. Cytopathological examination revealed granulomatous inflammation with caseous necrosis. On follow-up after two weeks, the patient continued to be symptomatic, and

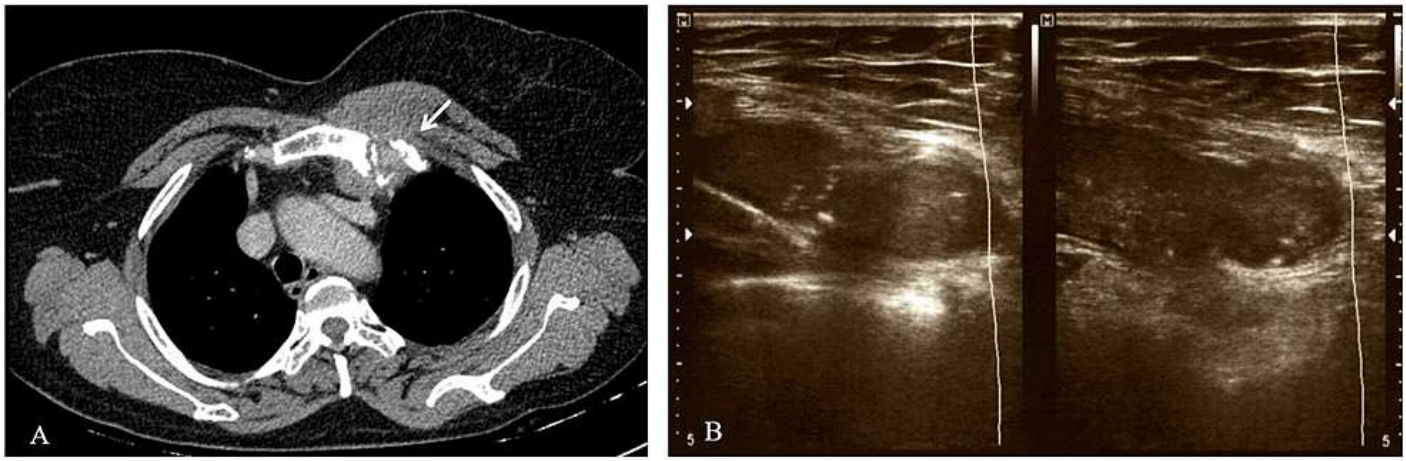


Figure 1: (A) CT scan of neck region showing (arrow) the necrotic destruction of left sternoclavicular joint with involvement of adjacent soft tissue. (B) USG showing the fluid-filled swelling with a needle in situ for aspiration.

an increase in the size of the swelling was noticed. USG of the swelling was performed which revealed a necrotic area with liquefaction (Figure *1B*). A repeat USG-guided aspiration was performed immediately and the aspirated pus was sent to the Microbiology laboratory for detailed investigations. One part was used for staining and aerobic bacterial culture, whereas the other was used for TrueNat. Gram staining of the pus showed few pus cells with no microorganisms. On Ziehl-Neelsen staining, no acid-fast bacilli were seen. The bacterial culture also came out to be sterile after 48 hours. The other part of the aspirate was inoculated directly in lysis buffer provided with the Trueprep AUTO MTB Sample pretreatment pack (Molbio Diagnostics, Goa India). DNA was extracted using Trueprep Auto Universal Cartridge Based Sample Prep Device. Extracted DNA was added to the Truenat MTB microchip containing lyophilized master mix. The real-time polymerase chain reaction (PCR) was done using a pre-programmed profile on Truelab Quattro Real-Time Quantitative micro PCR Analyzer. It came out to be positive for Mycobacterium tuberculosis. Additionally, Rifampicin resistance was not detected in the sample using the Truenat MTB-RIF Dx kit. The reserved sample was sent for GeneXpert, which again confirmed the findings of Truenat. As a result, the patient was started on anti-tubercular therapy. On a follow-up visit, she became afebrile with a gradual decrease in the swelling size.

Discussion

TB is an infectious disease caused by the airborne transmission of acid-fast bacillus *Mycobacterium tuberculosis*. It is a major cause of morbidity and mortality worldwide, especially in Southeast Asia. Extrapulmonary TB is commonly reported in forms of lymphadenitis, pleural effusion, osteoarticular and abdominal TB. Sternoclavicular joint TB is reported only in 1-3% of all osteoarticular TB and is one of the unusual locations of extrapulmonary TB [3]. The exact mechanism for primary sternal TB is still uncertain. It usually occurs due to a hematogenous spread from a pulmonary focus or a contiguous spread from apical pulmonary tuberculous focus to the joint. It may also be seen in immunocompromised conditions where following reactivation the organism may reach the joint via blood. In a retrospective analysis of 926 osteoarticular TB, nine cases of sternoclavicular TB were found over a period of five years [4]. The diagnosis in most of the cases was difficult due to the paucibacillary nature of the disease with the acid-fast bacilli being observed only in very few cases [3-5]. In our case also acid-fast bacilli were not observed in

microscopy, although the granulomatous inflammation was seen in the cytological examination after fine-needle aspiration. Due to past history of sarcoidosis, the cytopathological report was not strong enough evidence for starting anti-tubercular therapy in our case. Availability of Truenat helped in arriving at the diagnosis in our case. Truenat MTB is an indigenous molecular test that has been recently endorsed by the WHO for the diagnosis of pulmonary TB as a first-line test. The ability to detect rifampicin resistance using the same platform is a distinct advantage provided by this platform over direct microscopy [6]. In the study conducted on the sputum samples, it was seen that Truenat MTB results were largely concordant with other WHO-endorsed nucleic acid amplification test platforms, GeneXpert. The Truenat MTB had good sensitivity and specificity in case of detection with hands-on time of fewer than three hours as well as fits the requirements in resource-limited health care settings [7]. During the current COVID-19 pandemic, Truenat was one tool that was utilized for the diagnosis of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in India with more than 2500 Truelab workstations currently operational at 1008 sites in 530 districts of India [8]. This technological infrastructure built for the COVID-19 pandemic may be leveraged for ramping up the diagnosis of other major diseases like TB, HIV, etc [9].

Conclusions

Sternal TB is usually misdiagnosed as osteoarthritis or inflammatory arthritis or even as a traumatic event. Various diagnostic modalities compatible with resource-limited settings are now available for microbiological confirmation of TB. Truenat is one such platform that has been approved for diagnosing pulmonary TB. Its use in detecting extrapulmonary TB will provide the necessary boost to the national TB elimination program. This case highlights the need to evaluate the use of the Truenat platform in the diagnosis of extrapulmonary TB.

SO: https://www.cureus.com/articles/74217-a-rare-case-of-sternoclavicular-tuberculosis-diagnosed-using-microchip-based-polymerase-chain-reaction-in-a-diabetic-female

A European Journal TMIH Tropical Medicine & International Health

Prevalence and Risk Factors associated with Latent Tuberculosis Infection among Household Contacts of Smear Positive Pulmonary Tuberculosis patients in South India

Yuvaraj Krishnamoorthy,Komala Ezhumalai,Sharan Murali,Sathish Rajaa,Maria Jose,Abilasha Sathishkumar,S Govindarajan,Charles Horsburgh,Natasha Hochberg, **... See all authors**

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https://doi.org/10.1111/tmi.13693

Abstract

Objective

We aimed to determine the prevalence and find the risk factors associated with latent tuberculosis infection (LTBI) among the household contacts (HHC) of pulmonary TB patients.

Methods

This cohort study was conducted from 2014 to 2019. Pretested standardized questionnaires and tools were used for data collection. Prevalence of LTBI among HHCs of TB patients was summarized as proportion with 95% confidence interval (CI). Mixed effects generalized linear

modeling function (*meglm*) in STATA with family Poisson and log link was performed to find the factors associated with LTBI.

Results

In total, 1523 HHC of pulmonary TB patients were included in the study. Almost all HHC shared their residence with the index case (IC) for more than a year; 25% shared the same bed with the IC. The prevalence of LTBI among the HHC of TB patients was 52.6% (95%CI: 50.1%-55.1%). In an adjusted model, we found that among HHC belonging to the age group of 19-64 years (aIRR=1.2; 95%CI: 1.1-1.3; p-value: 0.02), to the age group >65 years (aIRR=1.4, 95%CI: 1.1-1.9, p-value: 0.02) and sharing the same bed with the IC (aIRR=1.2, 95% CI: 1.1–1.3, p value: 0.04) were independent determinants of LTBI among the HHC.

Conclusion

One in two household contacts of TB patients have latent tuberculosis infection. This underscores the need of targeted contact screening strategies, effective contact tracing and testing using standardized methods in high TB burden settings.

SO: https://onlinelibrary.wiley.com/doi/abs/10.1111/tmi.13693

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