

## DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE Day Wednesday 20211208

## What we know about Omicron (Hindustan Times: 20211208)

https://epaper.hindustantimes.com/Home/ArticleView

## Binayak Dasgupta

New Delhi: Global stock markets, including India's bourses, rallied on Tuesday, as did oil prices and the US dollar, as some signs trickled in of the Omicron variant possibly not being as worrisome as previously thought.

These signs suggest the variant may be causing a milder version of the disease, and they originate from data by the National Institute of Communicable Diseases (NICD) in South Africa. A key endorsement of this early trend was made by White House medical adviser Anthony Fauci late on Monday, although he stressed that it was still early days.

### Reading ground data

According to NICD data analysed by the Financial Times, there are two trends that can be read from Omicron hotspot Gauteng province: First, the share of Covid-positive hospital patients requiring intensive care and ventilators is lower when compared to the beginning of the Delta wave; and second, the overall number of people testing positive is now close to levels seen during the Delta wave, but ICU admissions have not risen in lockstep.

This mirrors a recent assessment by the NICD that found that this time, most of the hospitalised people are being treated on "room air" instead of needing oxygen.

If these trends hold up, Omicron may indeed be considered a milder variant. At present, the conclusion may be tenuous since there seems to be a larger share of younger people infected.

#### New scientific evidence

Two scientific studies reinforce what is being observed.

The first, one of the earliest neutralisation tests from which results seem to be available, was by GlaxoSmithKline's biotech arm Vir Biotechnology, which found the firm's antibody treatment is still effective against the full combination of mutations in Omicron.

The study, data for which was not yet out as on Tuesday, found there was a less than threefold drop in neutralisation by the company's product sotrovimab of an engineered virus with the same configuration as Omicron.

The second is new protein modelling by researchers from University of North Carolina, who used the AlphaFold2 deep learning model to create a simulation of the variant. Using what they found, and additional simulations of how known antibodies interact with the virus, the researchers predicted there are "some structural changes in the receptor-binding domain that

may reduce antibody interaction, but no drastic changes that would completely evade existing neutralising antibodies (and therefore vaccines)".

The findings are significant since AlphaFold2, a machine learning protein modelling programme created by Google's DeepMind, has previously shown unprecedented accuracy in determining how proteins fold, a visualisation that is a challenge to estimate from merely reading genomic data.

It is still early days for conclusive signs, but the early hopeful clues may not be entirely misleading.

## Covishield production to be halved (Hindustan Times: 20211208)

https://www.hindustantimes.com/india-news/why-serum-institute-may-halve-its-vaccine-production-dilemma-says-adar-poonawalla-101638941100863.html

Covishield production to be halved; Adar Poonawalla says he's in dilemma

Serum Institute does not have major orders for Covishield at present. "We must keep in mind that we don't need a situation like last year where suddenly the country needs hundreds of millions of doses, that won't be possible if we dial down our production," Adar Poonawalla said.



Serum has already written to the government seeking clarification on whether it would need booster doses. (ANI)

Serum Institute of India may halve its vaccine production at a time when new variant of SARA-CoV-2 Omicron is spreading fast in India, reports said quoting CEO Adar Poonawalla. In an interview, Poonawalla said they do not have enough government orders for Covishield. "I am actually in a dilemma that I never imagined... we are producing 250 million doses a month but the good news is that India has covered up a large part of its population and we would have completed all our orders to the ministry of health in a week's time," Poonawalla said, as quoted by news agency PTI.

The Pune-based vaccine firm has already written to the government seeking clarity on its future requirement for both doses of vaccines and also for booster doses, if the government plans any, in future.

As there are no other orders with Serum Institute as of now, the company plans to cut down its production on a monthly basis until the orders again pick up either in India or the world, Poonawalla said.

"Over the eight months when we could not export, other countries managed vaccine supplies from donations from the US and elsewhere and we have lost a lot of market share," he said.

"If they need more vaccines for the booster doses, we have already written to them (central government). Now it is their decision on the booster policy whether they will procure more and stockpile before the next surge happens, if at all it comes. We are awaiting their directions," Poonawalla added.

"We must keep in mind that we don't need a situation like last year where suddenly the country needs hundreds of millions of doses, that won't be possible if we dial down our production. So that is why we have explained this to the government and experts to please let us know now. If you need more doses for boosters we have it in stock, we can produce more. Just give us that guidance. That discussion is on at the moment."

Serum Institute currently has a stock of 500 million doses.

## **Coronavirus pandemic: (Hindustan Times: 20211208)**

https://www.hindustantimes.com/india-news/india-reports-8-439-new-covid-19-cases-23-7-higher-than-yesterday-101638939781449.html

## India reports 8,439 new Covid-19 cases, 23.7% higher than yesterday

The active caseload fell lowest in the last 555 days and now stands at 93,733. With 0.27 per cent, it currently accounts for less than 1 per cent of total cases.



The daily positivity rate also slightly increased as it reached 0.70 per cent on Wednesday.(HT Photo)

India on Wednesday reported 8,439 cases of Covid-19 in the last 24 hours. It is 23.7% higher than Tuesday when the total caseload saw a rise of 6,822, according to the data by the Union ministry of health and family welfare. The cumulative now stands at 3,46,56,822 including 473,952 deaths, according to the health ministry.

The active caseload fell lowest in the last 555 days and now stands at 93,733. With 0.27 per cent, it currently accounts for less than 1 per cent of total cases.

The daily positivity rate also slightly increased as it reached 0.70 per cent on Wednesday. It has been less than two per cent for the last 65 days, while the weekly positivity rate (0.76%) remained below one per cent.

The country has administered 1.29 billion vaccine doses so far, the health ministry also said. Meanwhile, 23 people are found to be infected with the Omicron variant of the Covid-19 in India. So far, Karnataka, Delhi, Maharashtra, Gujarat and Rajasthan have reported Omicron infections in international passengers in the country.

The Omicron variant first emerged in southern Africa late last month. The scientists there identified the fast-spreading strain in one of the samples taken from Botswana. Since then, Omicron has spread to two dozen countries.

The World Health Organization (WHO) has categorised Omicron 'variant of concern' due to its highly contagious nature. The world body also warned people to remain cautious and asked to follow the health protocol strictly.

In view of the Omicron, the Indian government implemented strict measures for international travellers, especially those who are arriving from Omicron-hit places, categorised as 'at risk' countries.

## Pfizer's Covid-19 vaccine (Hindustan Times: 20211208)

https://www.hindustantimes.com/world-news/pfizers-covid-19-vaccine-provides-less-immunity-to-omicron-than-to-other-strains-early-study-101638923992898.html

## Pfizer's Covid-19 vaccine provides less immunity to Omicron than to other strains: Early study

Omicron resulted in about a 40-fold reduction in levels of neutralising antibodies produced by people who had received two doses of the Pfizer-BioNTech SE shot, compared with the strain detected in China almost two years ago.



Pfizer's Covid-19 vaccine has been seen to be providing less immunity to Omicron than to other variants in an early study. (REUTERS / File Photo)

Researchers in South Africa have found in an early study that Pfizer's vaccine against the coronavirus disease (Covid-19) actually provides less immunity to the Omicron variant than to other major versions of the virus. In lab experiments conducted at the Africa Health Research Institute in Durban, it was observed that Omicron resulted in about a 40-fold reduction in levels of neutralising antibodies produced by people who had received two doses of the Pfizer-BioNTech SE shot, compared with the strain detected in China almost two years ago.

Alex Sigal, the head of research at the laboratory, said that the loss of immune protection is "robust, but not complete" and that further efficacy studies are needed to appropriately take on board the exact extent of the vaccine's impact in mitigating the disease caused by this new strain.

Speaking at an online presentation of the first reported experiments gauging the efficacy of the Pfizer Covid-19 vaccine against Omicron, Sigal said there will be "more breakthrough" of vaccine-induced immunity as he pushed the idea of getting booster shots to protect oneself against the new variant.

"A good booster probably would decrease your chance of infection, especially severe infection leading to more severe disease," the Bloomberg news agency quoted the researcher as saying. "People who haven't had a booster should get one, and people who have been previously infected should be vaccinated."

## Omicron not more severe than Delta (Hindustan Times: 20211208)

 $\underline{https://www.hindustantimes.com/world-news/omicron-not-more-severe-than-delta-existing-vaccines-will-work-who-101638921979376.html$ 

## Omicron not more severe than Delta, existing vaccines will work: WHO

Meanwhile, researchers in South Africa have found that Pfizer's Covid-19 vaccine actually provides less immunity to the Omicron variant than to other major versions of the virus.



Omicron's rapid spread in South Africa has raised concern that the immune protection from vaccination may not be enough, but experts disagree. (REUTERS / File Photo)

Amid mounting global concerns over Omicron, the new variant of the coronavirus disease (Covid-19) said to be more transmissible and capable of undergoing frequent mutations, the World Health Organisation (WHO) has laid to rest apprehensions about the efficacy of existing vaccines against the new strain. A top WHO official told the AFP news agency on

Tuesday that there is no reason to assume that Omicron is more severe than the variants which came before, or that existing vaccines will fail against it.

Michael Ryan, the World Health Organisation's emergencies director, told AFP in an interview that there currently is no indication to suggest that Omicron, although highly infectious, causes a more severe disease than previous Covid-19 variants such as Delta. The existing vaccines should protect people who contract Omicron against the worst outcomes of the disease, he said.

"We have highly effective vaccines that have proved effective against all the variants so far, in terms of severe disease and hospitalisation, and there's no reason to expect that it wouldn't be so [for Omicron]," the WHO official was quoted as saying.

Ryan, however, said that more research was needed into studying the Omicron variant to appropriately take on board exactly how threatening it is poised to be.

A similar assurance was echoed on Tuesday by US infectious diseases expert Anthony Fauci, who said that Omicron is certainly not worse than the previous strains, including Delta.

According to the chief medical advisor to the US president, Omicron is "clearly highly transmissible" but might actually be less severe than Delta, as indicated by the ratio between the number of infections and the number of hospitalisations in South Africa.

Fauci, too, said that more epidemiological data from around the world is needed to affirm scientific consensus on this. The results from lab experiments that tested the potency of antibodies from current vaccines against Omicron should come in the next few days to a week, he added.

Play Video

Analysis: Inside the Ghislaine Maxwell trial

One of Ghislaine Maxwell's accusers testified Tuesday that she was just 14 years old when the British socialite had her undress, fondled her and told her she had a "great body" that financier Jeffrey Epstein would enjoy. (Dec. 8)

Meanwhile, researchers in South Africa have found that Pfizer's Covid-19 vaccine actually provides less immunity to the Omicron variant than to other major versions of the virus. The loss of immune protection is "robust, but not complete," Alex Sigal, head of research at the Africa Health Research Institute in Durban, said in an online presentation of the first reported experiments gauging the effectiveness of the vaccine against the new variant.

## Covid-19: Chhattisgarh ramps up medical 02 productions

(The Times of India: 20211208)

https://timesofindia.indiatimes.com/city/raipur/covid-19-chhattisgarh-ramps-up-medical-o2-production/articleshow/88155613.cms

RAIPUR: Taking no chances amidst concerns over the spread of new variant of Covid, the state government has ramped up production of medical oxygen. Now, as many as 21000 patients can be provided oxygen every day. In the last six months, 73 oxygen plants have been set up in hospitals across the state.

Now, 15000 patients can be accommodated on oxygen beds, said officials of the health department.

During the peak of the second wave, the oxygen production in the state was 386.92 tonnes per day, which has been enhanced to 461 tonnes a day.

Over 112 oxygen plants are being constructed at several locations. They will come up in 3-4 months. Once this is done, as many as 25000 patients can be accommodated on beds with oxygen, said officials.

In the event of another wave, no one will face an issue of oxygen shortage. All arrangements are in place whether it is an oxygen plant or a cylinder, said a senior health official.

To be sure, four hospitals in Raipur: Pandri District hospital, Mana Covid centre, Ayurvedic hospital and Ayush University have been put on alert.

If Covid case-load is high, patients will be taken to these hospitals. Oxygen plants are already in place in all the four hospitals.

During the second wave, around 300 tonnes of medical oxygen was being produced in the state. This includes oxygen being produced through hospitals and industries.

As the demand went up, new units were allowed to produce oxygen only during the second wave, so the oxygen production was raised to more than 386.92 tonnes in April itself.

The oxygen needed at hospitals touched 26 tonnes from 4.25 in March end.

Then, in the first week of April, the oxygen-supported patients in the state exceeded 3000 and the consumption had also increased to more than 56 tonnes.

Medical oxygen is being produced in the state by both private companies and hospitals. During the second wave , medical oxygen produced by industries was around 100 to 150 tonnes.

## ICMR's new rapid tests set to be cheaper, give results in 30 mins

: (The Times of India: 20211208)

 $\underline{\text{https://timesofindia.indiatimes.com/india/icmrs-new-rapid-tests-set-to-be-cheaper-give-results-in-30-mins/articleshowprint/88153722.cms}$ 



PUNE: A soon-to-be-introduced and visually interpreted rapid Covid test - developed by the Indian Council of Medical Research-National Institute of Virology and transferred to

Chennai and Delhi-based companies for production - could cut down the cost and the turnaround time by almost 40%, ICMR-NIV officials said.

The test would be made available within two weeks at the airports in India and other places. The companies have been asked to scale up production amid Omicron concerns.

The molecular-based technology used in this rapid test kit neither requires expensive machines like RTPCT, high-speed centrifuges nor a skilled workforce to conduct the test. "The test, RT-LAMP, has 100% sensitivity and 100% specificity. It takes only 30-40 minutes to churn out the result, which can be visually interpreted. Also, the test can be very easily deployed at the airports, docks, railway stations and other entry points for the screening of patients for Covid as it doesn't require sophisticated machinery and skilled workforce," said an ICMR official.

The RT-LAMP kit is validated by the National Institute of Biologicals, Noida. "It will be cheaper than rapid RTPCR," an ICMR official said. As against the current rapid PCR test which costs Rs 3,900 and takes an hour, the ICMR-NIV-developed test kit is likely to be costing not more than Rs 3,000.

## **Coronavirus: (The Times of India: 20211208)**

https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/coronavirus-the-possible-reason-behind-why-omicron-variant-may-be-more-transmissible/photostory/88146497.cms

# Coronavirus: The possible reason behind why Omicron variant may be more transmissible

#### 1.1.1 Will the Omicron variant be less severe than other variants?

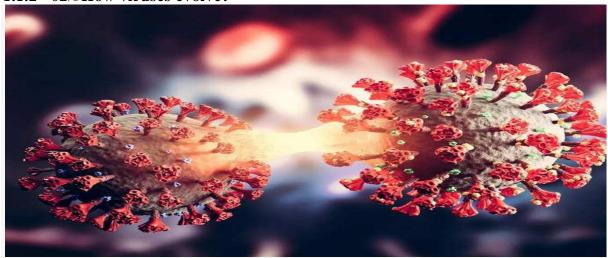


Omicron - the new 'variant of concern' has sent shock waves around the world. Now identified in multiple countries, including India, it has led to a state of panic and chaos.

While experts believe that the new variant is heavily mutated, it could possibly evade vaccine immunity, which could mean higher transmissibility. But what's also important to note is that the new variant has not led to any casualties so far. There have been no hospitalization cases and people have recovered from mild infections, which is surely a sign of low severity. While

it is difficult to determine why this is happening, experts have come up with different theories. Let us find out what they are.

#### 1.1.2 02/5How viruses evolve?



Since the onset of COVID-19 and due to the emergence of potentially dangerous variants, scientists and medical professionals have urged people to take all appropriate measures and promote mass vaccination.

However, as far as the history of pandemics go, viruses have evolved to become less dangerous. Many have said that over time, even the most deadly viruses lose their fatalistic character and become less virulent.

The evolution of any virus depends on how well it is transmitted from host to host. From an evolutionary perspective, harming it's host does not benefit the virus by any means. Rather, viruses that can spread and replicate are the ones that thrive and survive.





Having infiltrated the walls of several countries in such a short span of time, the Omicron is thought to be highly transmissible too. Fresh cases have been reported daily, since the onset of the new variant, and this has led to widespread concern. On the positive front, there have been no deaths or severe cases linked to the new variant.

Dr Angelique Coetzee, the chair of the South African Medical Association has said that there have been no reports of severe cases - no cases of hospitalization or low oxygen levels so far. While there is no confirmed data around whether the Omicron variant is more transmissible than the Delta, the South African doctor says that it is surely transmissible.

1.1.4 04/5Does milder, less virulent cases mean more transmissibility then?



Since, existing data suggests that Omicron cases have been 'mild' so far, experts believe it to be the reason behind why they are more transmissible.

Recently, Dr Eli David, Researcher, Lecturer and a leading AI expert, took to Twitter, suggesting the same. "It (Omicron variant) may be highly transmissible, but so far the cases we are seeing are extremely mild," he quoted the South African Medical Association. Further below, he wrote, "This makes a lot of sense. Less virulent mutations have greater evolutionary advantage. This is exactly how the Spanish flu ended."

Looking at the theoretical aspect of viral evolution, this could be a possibility. The idea dates back to the 1980s when evolutionary epidemiologist Paul Ewald developed the "theory of virulence". The theory suggests the more virulent the germ, the less likely it is to spread. For instance, if a person becomes extremely sick to the extent of dying, then they can't really spread the infection.

This means, if a virus wants to survive and evolve, they will have to lower their virulence, which in turn increases transmission.

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05/5What earlier pandemics suggest?



There have been many historic instances where the viruses have become less dangerous and more transmissible over time. For example, the H1N1 influenza viruses, which were responsible for the 1918 "Spanish flu" and 2009 "swine flu" pandemics still exist, however are less severe.

There is no evidence to suggest that the SARs-COV-2 virus functions in the same way. If it does, then we may be looking forward to another cold virus that will become easy to manage. But up until now the COVID-19 variants that have emerged have only proved more dangerous than the previous one.

## (The Times of India: 20211208)

https://www.thehindu.com/sci-tech/health/highly-unlikely-existing-vaccines-will-fail-against-omicron-who/article37892111.ece



There are indications that Omicron is better at infecting people who have been vaccinated or already had COVID-19. | File

In the fight against all COVID-19 variants, WHO emergencies director Michael Ryan said, "the best weapon we have right now is to get vaccinated."

Omicron does not appear to cause more severe disease than previous COVID-19 variants, and is "highly unlikely" to fully dodge vaccine protections, a top WHO official said.

The World Health Organization's second-in-command, said that while a lot remained to be learned about the new, heavily mutated variant of COVID-19, preliminary data indicated it did not make people sicker than Delta and other strains.

"The preliminary data doesn't indicate that this is more severe. In fact, if anything, the direction is towards less severity," WHO emergencies director Michael Ryan said in an interview, insisting though that more research was needed.

"It's very early days, we have to be very careful how we interpret that signal," he said.

At the same time, he said there was no sign that Omicron could fully sidestep protections provided by existing COVID-19 vaccines.

"We have highly effective vaccines that have proved effective against all the variants so far, in terms of severe disease and hospitalisation," the 56-year-old epidemiologist and former trauma surgeon said.

"There's no reason to expect that it wouldn't be so" for Omicron, he said, pointing to early data from South Africa where the variant was first detected that "suggest the vaccine at least is holding up in protection terms".



The new variant of COVID-19 should be fought with the same measures, including vaccines, masks and physical distancing. | File

Vaccination is the best weapon

Mr. Ryan acknowledged it was possible that the existing vaccines might prove less effective against Omicron, which counts more than 30 mutations on the spike protein that dots the surface of the coronavirus and allows it to invade cells.

But he said it was "highly unlikely" it would be able to evade vaccine protections altogether.

"We have to confirm if there's any lapse in that protection, but I would expect to see some protection there," he said.

"The preliminary data from South Africa wouldn't indicate that we will have a catastrophic loss of efficacy. In fact, the opposite at the moment," Mr. Ryan said.

In the fight against all COVID-19 variants, he said, "the best weapon we have right now is to get vaccinated."

Two weeks after first being identified, Omicron has been found in dozens of countries around the world.

Early data from South Africa indicates that the new variant is likely more transmissible than previous variants, Mr. Ryan said, adding that this was not a surprise.

"When any new variant emerges, it will tend to be more transmissible, because it's got to compete with previous variants," he said.

#### Same rules for new variant

Mr. Ryan said one could expect Omicron to gradually replace Delta as the dominant strain.

But he pointed out that Omicron had so far been seen spreading especially quickly in South Africa, where Delta had waned, and may just be "exploiting a gap in the transmission of Delta".

There are also indications that Omicron is better at infecting people who have been vaccinated or already had COVID-19.

"There is some evidence to suggest that reinfection with Omicron is more common than it was with previous waves or previous variants," Mr. Ryan said.

But, "we're particularly interested in seeing not whether you can be reinfected with Omicron, but whether any new infection is more or less severe," he said.

He said that, as the current COVID-19 vaccines aim to prevent severe disease but do not necessarily protect against simply contracting the virus, reinfections with mild or no symptoms were of lesser concern.

In any case, Mr. Ryan said, despite its mutations, the new variant was still COVID-19, and should be fought with the same measures, including vaccines, masks and physical distancing.

"The virus hasn't changed its nature. It may have changed in terms of its efficiency, but it hasn't changed the game entirely," he said.

"The rules of the game are still the same."

## Coronavirus: (The Tribune: 20211208)

https://www.tribuneindia.com/news/himachal/covid-19-43-students-found-positive-in-pandoh-347607

## Covid-19: 43 students found positive in Himachal's Pandoh

54 new cases, 2 deaths in Himachal

As many as 43 students of Jawahar Navodaya Vidyalaya, Pandoh, in Mandi district were found Covid positive yesterday.

According to Chief Medical Officer Dr Devender Sharma, around 35 students of the school were found infected a few days ago. As per Covid protocol, after seven days, the samples of all students and teachers were taken.

The CMO said, "All 43 students have been isolated for 10 days. They are asymptomatic. The school management is adopting proper protocol, where exams are under way."

Meanwhile, 54 Covid cases were reported in the state on Tuesday, taking the tally to 227,684. Besides, two persons died of the virus in Hamirpur and Mandi.

The highest 15 cases were reported in Shimla, followed by 13 in Kangra, 12 in Una, five in Hamirpur, four in Solan, three in Mandi and two in Bilaspur. The number of active cases declined to 736.

## Coronavirus (Hindustan: 20211208)

https://www.livehindustan.com/national/story-who-europe-said-5-to-14-age-group-now-account-for-highest-rates-of-reported-covid-19-infection-in-india-no-final-recommendation-on-vaccine-for-children-5274603.html





दुनिया के 38 मुल्कों में कोरोना वायरस के ओमिक्रॉन वेरिएंट से संक्रमित लोग मिले हैं। इसमें भारत भी शामिल है। इस वेरिएंट ने स्वास्थ्य विशेषज्ञों की चिंता बढ़ाई है। इस बीच बच्चों पर वायरस के असर को लेकर गहन मंथन जारी है। इधर विश्व स्वास्थ्य संगठन (डब्ल्यूएचओ) के यूरोप कार्यालय ने मंगलवार को कहा कि क्षेत्र में पांच से 14 वर्ष आयु वर्ग के बच्चों में कोरोना वायरस संक्रमण की दर सर्वाधिक हो गई है। डब्ल्यूएचओ यूरोप के क्षेत्रीय निदेशक डॉक्टर हैंस क्लुग ने यह भी दलील दी कि टीकाकरण का आदेश बिल्कुल एक अंतिम उपाय होना चाहिए।

## 2 यूरोप में डेल्टा वेरिएंट खतरा

डॉक्टर हैंस क्लुग ने कहा कि कोविड-19 से होने वाली मृत्यु दर पहले की तुलना में काफी कम बनी हुई है। लेकिन उन्होंने कहा कि मध्य एशिया तक फैले क्षेत्र के 53 देशों में पिछले दो महीनों में कोरोना वायरस मामले और मौत की संख्या दोगुनी रही है। उन्होंने जोर देते हुए कहा कि कोरोना वायरस के डेल्टा स्वरूप के व्यापक प्रसार से खतरा बना हुआ है और नये ओमिक्रॉन स्वरूप के क्षेत्र के 21 देशों में अब तक 432 मामले सामने आए हैं।

उन्होंने कोपेनहेगन, डेनमार्क स्थित डब्ल्यूएचओ यूरोप मुख्यालय से संवाददाताओं से कहा, "डेल्टा स्वरूप अब भी समूचे यूरोप और मध्य एशिया में प्रबल है और हम जानते हैं कि कोविड-19 टीके रोग की गंभीरता को कम करने और इससे होने वाली मौत के खतरे को कम करने में प्रभावी बने हुए हैं।