



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Wednesday 202101229

Unhealthy states

UP, Bihar and others must prioritise wellness (The Tribune:202101229)

<https://www.tribuneindia.com/news/editorials/unhealthy-states-355687>

For the fourth year running, Kerala has emerged as the best performer among large states on NITI Aayog's Annual Health Index, which ranked the performance of states and Union Territories for 2019-20, incorporating 24 key indicators. Kerala had a composite score of 82.2 out of 100, followed by Tamil Nadu (72.42) and Telangana (69.96). The top performers have remained unchanged, with some of them only swapping places in the top-10. Unsurprisingly, the bottom of the list for large states finds Uttar Pradesh at the 19th spot, with a score of 30.57. Bihar (31), Madhya Pradesh (36.72) and Rajasthan (41.33) are above UP. All of them have retained their lowly positions since the previous survey, confirming their reputation as the incorrigible laggards.

The index softens the blow for UP by placing it on top of the list of states which have made the greatest improvement since the 2018-19 index. But Bihar, again with great room for improvement, is only 11th on this particular list, Madhya Pradesh is sixth and Rajasthan a disappointing 17th with a fall of 0.55 in its score. While experts have picked holes in the criteria of the index, anecdotal evidence of people's experiences during the Covid-19 pandemic bear out the rankings — patients in the southern states were delivered better services by the public healthcare system.

However, it may not be prudent to treat UP — with a population of around 20 crore — and Kerala (3.3 crore) with any degree of equivalence. The lowest-ranked states on the index are also the poorest in the country, with the lowest per capita income, lowest per capita GDP and lowest Human Development Index scores. But the example of Odisha proves that change is possible with political will and a focused approach. The state has shown improvement on all indices in recent decades. The Bimaru states — Bihar, MP, Rajasthan and UP — must study the Odisha model if they are serious about changing the lot of their people.

India's new vaccination

Understanding the key numbers behind India's new vaccination (Hindustan Times:202101229)

plan<https://epaper.hindustantimes.com/Home/ArticleView>

By Abhishek Jha India will start vaccinating children in the 15-18 age group from January 3, Prime Minister Narendra Modi announced on December 25. A precautionary third dose will also be given from January 10 to health care and front line workers, and people over 60 with co-morbidities, he said. Those who got the second jab 39 weeks (roughly nine months) ago will be eligible for these "precautionary doses". How many doses will India require to inoculate the new cohorts? Will there be any shortage? Which countries are giving booster shots to most of their population? We answer these questions in four charts.

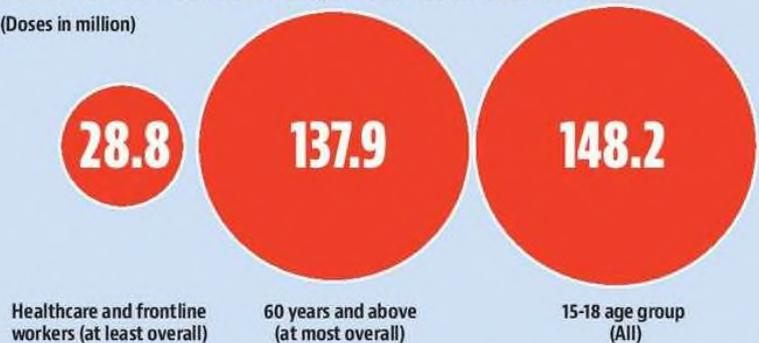
1 How many people will the next phase of vaccinations cover?

India has 137.9 million senior citizens and 74.1 million in the 15-18 age cohort, according to 2021 projections by the National Commission on Population. The number of health and front line workers will vary, depending on who are currently in that group. However, they will not be an insignificant number, given that 28.77 million first doses were administered to them till 26 December, health ministry data shows.

This translates into 240.7 million people, or an additional requirement of some 314.8 million doses in 2022 since the children will require two doses. This is likely an overestimate because not all above 60 years suffer from specified co-morbidities.

ADDITIONAL DOSE REQUIREMENT NEXT YEAR

(Doses in million)



Note: Some healthcare and frontline workers are still receiving their first doses. 8,387 received first doses in December. Estimate for them based on total first doses given up to December 26. Total population for senior citizens and double the total population for 15-18 age group shown here as dose requirement. Source: MoHFW press releases; National Commission on Population

2 Demand from children will exceed that of senior citizens initially

Even though the 15-18 age cohort is smaller than senior citizens, the initial demand from them will likely be higher. Since there will have to be an interval of 39 weeks for the third dose, the cut-off date for full vaccination is April 19 as inoculations for the elderly start on January 10. For those who become eligible on January 31, the cutoff date is May 10, 2021.

Assuming all eligible children receive their first jab in January, India will require an additional 104.1 million doses. It is not an insignificant number seen in comparison with the number of doses the country has administered every month. This is in addition to around 54.5 million people who will be eligible for second doses, if we just take the 12-week gap required for Covishield, or around 90% of the people who received first doses between October 16 and November 15.

ADDITIONAL DOSE REQUIREMENT IN JANUARY AS % OF DOSES GIVEN IN RECENT MONTHS

In January (All 15-18, at most in January for other groups eligible for boosters)

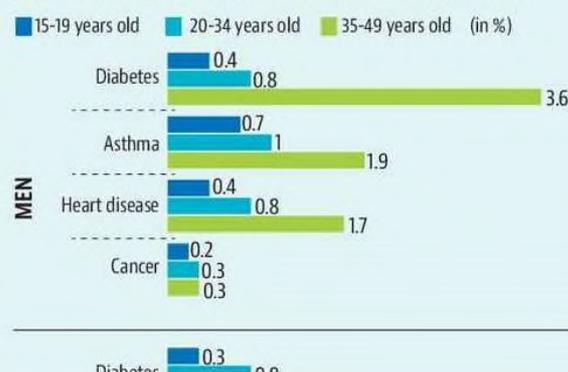


Note: Based on fully vaccinated HCW, FLW, and all 60+ people as on May 10, 2021; Source: MoHFW press releases; National Commission on Population

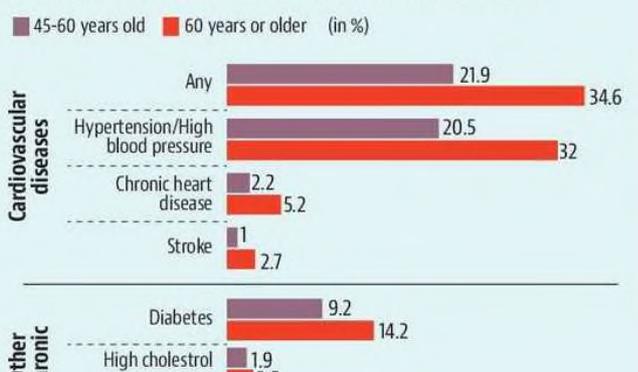
3 Older people have more co-morbidities, but make up small share

That the elderly are more vulnerable to coronavirus and should be given priority is a sound argument. Diseases such as diabetes, asthma, heart ailments and cancer are less prevalent in younger people, the 2015-16 National Family Health Survey showed. While it was limited to those of reproductive age of up to 49 years, the Longitudinal Ageing Study in India survey conducted in 2017-18 specifically for older age groups suggested even higher prevalence of such diseases in people aged 60 years and above. For instance, 35% of senior citizens reported at least one of three cardiovascular diseases, while only 22% in the 45-60 years cohort had such an ailment.

DISEASES REPORTED BY AGE GROUPS



DISEASES REPORTED BY INDIVIDUALS



India's omicron tally rises to 781, Delhi reports maximum cases

India's omicron tally rises to 781, Delhi reports maximum cases (The Tribune:202101229)

Delhi records the maximum number of 238 cases followed by Maharashtra at 167, Gujarat 73, Kerala 65 and Telangana 62

<https://www.tribuneindia.com/news/nation/indias-omicron-tally-rises-to-781-delhi-reports-maximum-cases-355845>

India has recorded 781 cases of the omicron variant of coronavirus across 21 states and UTs so far out of which 241 people have recovered or migrated, according to the Union Health Ministry data updated on Wednesday.

Delhi recorded the maximum number of 238 cases followed by Maharashtra at 167, Gujarat 73, Kerala 65 and Telangana 62.

With 9,195 people testing positive for coronavirus infection in a day, India's total tally of Covid cases rose to 3,48,08,886, while the active cases increased to 77,002, according to the data updated at 8 am.

The death toll has climbed to 4,80,592 with 302 fresh fatalities, the data stated.

The daily rise in new coronavirus infections has been recorded below 15,000 for the last 62 days now.

The active cases comprise 0.22 per cent of the total infections, the lowest since March 2020, while the national recovery rate was recorded at 98.4 per cent, the highest since March 2020, the ministry said.

An increase of 1,546 cases has been recorded in the active Covid caseload in a span of 24 hours.

The 302 new fatalities include 244 from Kerala and 22 from Maharashtra.

Of the 244 deaths in Kerala, 38 were recorded over the last few days and 206 designated as Covid deaths after receiving appeals based on the new guidelines of the Centre and the directions of the Supreme Court.

A total of 4,80,592 deaths have been reported so far in the country including 1,41,476 from Maharashtra, 47,066 from Kerala, 38,318 from Karnataka, 36,750 from Tamil Nadu, 25,107 from Delhi, 22,915 from Uttar Pradesh and 19,733 from West Bengal. PTI

India-US health care collaboration

India-US health care collaboration in spotlight as India approves 2 more Covid vaccines (The Tribune:202101229)

Taranjit Singh Sandhu, India's Ambassador to the US, in a tweet describes it as a model of India-US health care collaboration

India-US health care collaboration in spotlight as India approves 2 more Covid vaccines

<https://www.tribuneindia.com/news/nation/india-us-health-care-collaboration-in-spotlight-as-india-approves-2-more-covid-vaccines-355838>

India-US collaboration in the health sector is in the spotlight as the Central Drug Authority this week approved two more Covid vaccines – Corbevax and Covovax – and antiviral drug Molnupiravir for use in India.

Taranjit Singh Sandhu, India's Ambassador to the US, in a tweet described it as a model of India-US health care collaboration.

"Models of what India-United States health care collaboration can achieve for global good!" Sandhu said.

Indian companies working with Texas Children's, Baylor College of Medicine's National School of Tropical Medicine; Dr Peter Hotez, Prof and Dean of the National School of Tropical Medicine at Baylor and Co-Director of the Texas Children's Hospital Centre for Vaccine Development; NovaVax; Merck and Ridgeback Bio, tweeted the Indian diplomat.

During his visit to Houston in October, Sandhu had met Professor Hotez and held discussions on this issue.

In June this year, the ambassador visited the Novavax facility in Maryland. He also spoke to the CEO of Sanisure Thomas Hook.

Sanisure supplies components for the SII - Novavax collaboration. These have been part of a continuous outreach that the ambassador had with vaccine manufacturers and pharma companies.

Health Ministry

Health Minister Mansukh Mandaviya urges doctors to call off strike (The Tribune:202101229)

Says not able to hold NEET-PG counselling as matter sub judice

<https://www.tribuneindia.com/news/nation/mansukh-mandaviya-urges-doctors-to-call-off-strike-355628>

Health Minister Mansukh Mandaviya urges doctors to call off strike

Union Health Minister Mansukh Mandaviya today held a meeting with a delegation of protesting resident doctors and urged them to call off their strike over delay in NEET-PG counselling in the larger interest of the public. - File photo

Union Health Minister Mansukh Mandaviya today held a meeting with a delegation of protesting resident doctors and urged them to call off their strike over delay in NEET-PG counselling in the larger interest of the public.

Also read: Protesting doctors, police face-off in Delhi

Following the meeting with the delegation of the Federation of Resident Doctors' Association, he said all requisite steps were being taken by the government and a suitable reply with respect to the EWS report would be submitted to the Supreme Court before the scheduled date of hearing on January 6.

Cops and doctors enter into a scuffle in Delhi on Monday. Manas Ranjan Bhui

“Our resident doctors have been protesting for the last few days over the delay in NEET-PG counselling. I held a meeting with a delegation of the protesting doctors at Nirman Bhawan to resolve the issue,” the minister said.

“We are not able to hold the counselling because the matter is sub judice before the Supreme Court. The Government of India will submit a reply to the apex court before the scheduled date of hearing on January 6. We request the court to expedite the issue so that the counselling can be started at the earliest,” he noted. Mandaviya also expressed gratitude to the resident doctors and health care workers over the exemplary work done by them during the Covid crisis.

Intensifying their stir over the delay in NEET-PG 2021 counselling, a large number of resident doctors on Tuesday protested on the premises of Centre-run Safdarjung Hospital, even as police personnel were deployed to ensure maintenance of law and order.

The protest, a day earlier had taken a dramatic turn, as medics and police personnel had faced off in streets, with both sides claiming several persons suffered injury in the ensuing melee. —

detox diets

Yearender 2021: Do detox diets really help remove toxins from the body and aid weight loss? (The Indian Express:202101229)

"Make sure cleaning our insides look less like an punishment and more like loving your body," said experts

detoxAre you believer in detox diets? (Source: Getty/Thinkstock)

It would perhaps not be erroneous to say that ‘detox’ took over ‘immunity’ to become the buzzword this year. From detox juices and smoothies, to detox foods and diets — the trend made its presence felt everywhere — from social media to on our plates — owing to its promise of “cleansing the body of toxins”.

ALSO READ |Try these post-Diwali detox tips without having to hit the gym

But can eating certain foods and drinking a few ‘cleansing’ juices really help get rid of toxins from the body and also aid weight loss? To understand the trend and its effectiveness, we reached out to experts — read on to know what they said.

What is detox?

Detox or detoxification is a short-term dietary intervention that claims to help eliminate toxins from the body. They involve fasting for one to three days; or consuming specific liquids like fruit and vegetable juices and infused waters; or eliminating entire food groups; or taking laxatives, diuretics, enemas; or doing colon cleanses, said Purabi Gunjal, lead nutritionist, Proactive For Her.

Is it effective?

“There is little to no evidence to prove that detox diets remove any toxins from the body. Also, there are certain chemicals that cannot really be easily removed from our bodies like BPA, heavy metals, and organic pollutants. But going on a detox can lead to severe energy restriction, and in turn, fatigue, electrolyte imbalance, dizziness or loss of orientation; people can even overdose on laxatives and diuretics, which can potentially be harmful to their health,” Gunjal explained.

ALSO READ |Here’s a recipe for a detox infusion to help rejuvenate your body and mind

As per a National Center for Complementary and Integrative Health (NCCIH) report, a 2015 review concluded that there was no compelling research to support the use of detox diets for weight management or eliminating toxins from the body. A 2017 review said that juicing and detox diets can cause initial weight loss because of low intake of calories but that they tend to lead to weight gain once a person resumes with normal diet. There have been no studies on long-term effects of detoxification programs.

prebridal, detox water, detox juice, weddingday, dday, detox, drink up, hydration, tarla dalal, detox recipes, detox drinks, how to make detox water, strawberries, apples, vitaminc, skincare, skinglow, glow, detox diet, indianexpress.com, indianexpress, tarla dalal recipes, amla and ginger juice, spinach juice, green leafy juices, carrot and beetroot juice, Are you dependent on detox too much? (Photo: Getty Images/Thinkstock)

In fact, as per Simrun Chopra, Deep Health Coach and Founder, Nourish With Sim, one's body "has a sophisticated way of eliminating toxins that involve the liver, kidneys, digestive system, skin, and lungs". "Still, only when these organs are healthy, can they effectively eliminate unwanted substances. Otherwise, it is a health issue and needs special dietary protocols. For instance, kidney transplant, on dialysis, irregular bowel movements, fatty liver, polycystic kidneys, wheezing, eczema etc," she said.

Chopra said detox diets "are not only harmful to people with certain medical conditions, they could also be harmful in general".

How do detox drinks behave inside the body?

With a lot of cleanses which are "extremely expensive", we have this belief that they're going to be good for our body or it's going to have a 'cleansing effect' on our body, shared Gunjal. "But in reality, the 'cleansing juices' are mostly coming from fruit sugars or vegetable sugars — leading to high amounts of fructose in our body. When the body consumes excess fructose, it has a spasming effect on the GI tract, which then leads to the 'cleansing effect'. So, what is actually a reaction to the high amounts of fructose in our body, is considered the 'cleansing effect' because the marketing techniques have made us believe that. But it is not," warned Gunjal.

Then how do some people experience weight loss with detox diet?

The quick weight loss that is observed after doing detox diets is due to the "loss of fluids and carbohydrate stores from our muscles rather than fat". "This weight is regained quickly once the detox is over. These diets are unlikely to help you keep the excess weight off in the longer run," noted Gunjal.

The way ahead

Instead of counting on detox foods, one must add more natural, wholesome foods and also make some lifestyle tweaks, mentioned Chopra. "More whole foods, adequate fluid intake, regular exercise, sufficient sleep, and reducing alcohol, highly processed foods like aerated drinks and ready-to-eat meals. Give your body more of the good stuff so it struggles less with digestion," she said.

ALSO READ |Guide to eat right: The truth about 'detox' juices – more fad, less nutrition

Agreed celebrity dietician Shweta Shah and shared how one should try and "make sure cleaning our insides look less like an punishment and more like loving your body".

Here's what to you can do.

*Have half-inch ginger after every meal.

*Practice Shatpawli (100 steps after every meal)

*Have dinner closer to sunset

*Don't mix fruits with any other food.

*Don't heat honey

*Don't mix milk with any other fruits or foods.

“These small practices are not what would ideally fit the idea of detox that is shown everywhere but believe it or not, it surely does the same thing. Making sure harmful toxins are removed from your body daily is way better and easy,” noted Shah.

Vaccines and Anti-Viral Pills (The Asian Age:202101229)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=16064185>

As Covid cases rise, govt gives nod to 2 more vaccines & anti-viral pill

■ No docs' certificates needed by 60+ for 'precaution' jabs ■ 670 Omicron cases

SANJAY KAW
with agency inputs
NEW DELHI, DEC. 28

Expanding India's vaccine basket, the Central Drug Authority has approved the Serum Institute of India's Covid-19 vaccine Covovax, Biological E's jab Corbevax and anti-Covid pill Molnupiravir for restricted use in emergency situations.

The announcement by Union health minister Mansukh Mandaviya on Tuesday came a day after the Subject Expert Committee (SEC) on Covid-19 of the Central Drugs Standard Control Organisation (CDSCO) recommended granting emergency use authorisation (EUA) to the Covid-19 vaccines Covovax and Corbevax with certain con-

ditions. It also recommended granting restricted emergency use approval to the drug Molnupiravir for treatment of adult patients with Covid-19 and who have a high risk of progression of the disease.

The Centre has also exempted senior citizens aged 60 years and above with co-morbidities from having to produce or submit any certificate from a

doctor hospital at the time of administration of the "precaution" Covid-19 vaccine dose from January 10, 2022. Senior citizens with co-morbidities are only expected to obtain the advice of their doctor before deciding to avail of the third vaccine dose.

The government has also decided to provide precaution doses to all personnel

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Omicron (The Asian Age:202101229)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=16064269>

Keep polls on hold, focus on fight against Omicron

The arsenal of weapons against the Omicron variant just got a boost with the Centre clearing two more vaccines and granting emergency use authorisation for one antiviral drug that could help in treating mild to moderate cases and cut hospitalisation and mortality. Given the rapid global progress of the variant that is breaching defences like vaccine and infection-induced immunity and raising the number of new fresh cases and the caseload in multiples, India would need all possible help in staving off the worst aspects of the nightmarish second wave early this year from just the Alpha, Beta and Delta strains when infection and mortality rates hit all-time highs in the time of the coronavirus pandemic.

There are, however, points of concern raised by the decisions of the Subject Expert Committee (SEC) on Covid-19, particularly about restricting the booster doses for frontline workers and people above 60 with comorbidities to the same vaccine that they took in their first two doses. These are early days yet in comprehensive trials and studies of a virus that has been around for just over two years. Even so, research has pointed out that there may be benefits in mixing and matching vaccines. Of course, the decision has come with a rider that it could

Decisions being made now are in a dynamic situation and they could change as more clinical trials and studies are conducted, including in India. The EUA for antivirals could also rope in more such products...

change depending on the results of ongoing clinical trials in India. The nod given so far for eight vaccines, including an innovative homegrown "RBD protein sub-unit vaccine" named Corbevax and the nanoparticle Covovax, should present a wide choice for users under the guidance of the medical community.

The vaccination of about 75 million children between the ages of 15 and 18 is being restricted to the homegrown Covaxin. Maybe, this is by way of equalisation for a vaccine developed under the aegis of government agencies. Here again, the more widely used Covishield, which inoculated close to 90 per cent of the eligible Indian population, should have been considered for the children too. There is reason to believe a British claim that the UK is faring better in the fight against Omicron than Europe because of the wide use of the AstraZeneca vaccine (Covishield in India) as opposed to the mRNA vaccines that were preferred on the European continent. Cases may have gone up three-fold in the UK as compared to Christmas time of 2020, but the hospitalisation rate at Christmas 2021 is less than half and the Omicron mortality rate negligible so far.

Decisions being made now are in a dynamic situation and they could change as more clinical trials and studies are conducted, including in India. The EUA for antivirals could also rope in more such products from Big Pharma, particularly Paxlovid from Pfizer to go with the one given for Merck's Molnupiravir, in whose favour comes the fact that as many as 13 drug makers are already producing the pills under licence in India. Market conditions of supply may have been the fulcrum of major decisions taken in the space of four days to bolster India's incipient battle against Omicron.

Isn't there a way to think more constructively about solving the paradox of curfews by night, besides a ban on New Year's Eve parties and poll congregations by day in five election-bound states of 2022? A decision to put off the polls by a couple of months to let the Omicron wave subside would do much more in the time of elaborate preparation of defences against another variant of concern.

Super Vaccinator (The Asian Age:202101229)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=16063864>

Accidental entrepreneur

THE SUPER VACCINATOR

Mahima Datla talks about a journey that turned into a highly-satisfying passion — a journey that impacts every country in the world

SWATI SHARMA

THE ASIAN AGE

She was "slightly embarrassed" when she learnt that her name figures on the Hurun India Rich list 2020 — in fact, she was the only woman from the two Telugu states on it. "I was the subject of many jokes from close friends," smiles Mahima Datla, managing director, Biological E. "But on a serious note, if this was a validation of all the efforts to get here, I'm grateful. I'm also incredibly happy if it inspires women out there to dream big, start visualising their own success and have the confidence to fight those battles and make a great career of their own," says the 'accidental entrepreneur'. A student, who did not have a science background, she found herself helping the family's pharma business. And what is more, this 44-year-old has taken the business to new heights and made it one of the top companies producing vaccines and saving lives.

When she talks about her journey, one thing becomes clear — she braved all odds to make her company, Biological E (BE) great.

"Growing up, it was never a pre-set idea to join the family business. However, when I joined the company, we were also in the midst of restructuring and I wanted to be involved. That exercise helped me understand and appreciate what we were doing. This was also the time I came to understand how important vaccination is and how our company has the power to save lives. I decided to stay, and like they say, the rest is history. I can't believe it's been over 20 years," says Mahima, who did an undergraduate course in Business Administration and had long-term plans of joining an investment or consultancy firm. BE has now expanded its portfolio to include 8 WHO pre-qualified

products. It also has 6-8 other crucial products in the pipeline.

As the Omicron variant spreads, Biological E Limited is racing against time and preparing to launch its Covid vaccine 'Corbevax' soon, as the Govt approves emergency use of Corbevax. "Being one of the oldest players and leading global supplier of vaccines, it was definitely a huge responsibility to find a solution for this deadly virus. How could we not do anything to be a part of the solution?" says the Managing Director & CEO of the company.

VACCINES FOR ALL

Biological E (BE) began its journey with vaccines and generic biological products such as heparin injections. They added new technology and began manufacturing Tetanus Toxoid (TT) and Diphtheria, Tetanus, and whole cell Pertussis (DTwP) vaccines for sale in India.

"Vaccinations were not a well-funded public health priority in most countries, and there was a struggle to come up with the finances to introduce new vaccines. Until 1990, things remained the same," notes Mahima. "When the Children's Vaccine Initiative (CVI) was launched, its mission to immunize all children and bring in new vaccines for infectious diseases changed the game."

As per statistics, about 30 million children in poor countries went without being fully immunized because of the cost.

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THE ENTREPRENEUR'S JOURNEY

I CAN'T SAY I ALWAYS WANTED TO BE AN ENTREPRENEUR; I WOULD SAY IT ALL HAPPENED VERY ORGANICALLY. THE INITIAL IDEA WAS TO JUST GAIN SOME EXPERIENCE AND THEN DECIDE WHAT TO DO NEXT. THINGS TURNED OUT VERY DIFFERENTLY AND THE KIND OF RISKS WE'VE TAKEN AND CHALLENGES WE'VE FACED ARE VERY SIMILAR TO THAT OF AN ENTREPRENEURIAL JOURNEY.

— MAHIMA



GOVT APPROVES EMERGENCY USE OF CORBEVAX

"BIOLOGICAL E. LIMITED PLANS TO COMPLETE PRODUCTION AT A RATE OF 75 MILLION DOSES PER MONTH, ANTICIPATING OVER 100 MILLION DOSES PER MONTH FROM FEBRUARY 2022. THESE CAPACITIES WILL ENABLE THE HYDERABAD-BASED COMPANY TO DELIVER 300 MILLION DOSES AS PROMISED TO THE GOVERNMENT OF INDIA"

VACCINES FOR ALL

"WE WERE VERY CONSCIOUS ABOUT BALANCING THE DEVELOPMENT OF COVID VACCINES AND MAKING SURE THERE WAS NO INTERRUPTION OF THE PRODUCTION OF EXISTING VACCINATIONS FOR NEW-BORNS. I'M PROUD TO SAY, EVERY SINGLE CUSTOMER OF OURS RECEIVED ROUTINE VACCINES AND WE DIDN'T MISS A BEAT DESPITE THE CHALLENGES."

« Mahima Datla, managing director, Biological E.

FAMILY SUPPORT

"MY FATHER WAS INSTRUMENTAL IN INSTILLING THE BELIEF THAT NOTHING IS IMPOSSIBLE. BUT THE ONE PERSON WHOM I BRAINSTORM THE MOST WITH AND WHOSE JUDGEMENT I RELY ON BOTH PROFESSIONALLY AND PERSONALLY, IS MY BROTHER-IN-LAW NAREN, WHO HEADS OUR SPECIALITY INJECTABLE BUSINESS."



Vaccination (The Asian Age:202101229)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=16063868>

THE SUPER VACCINATOR

CONTINUED FROM PAGE 9

A major shift occurred in the industry thanks to the Bill and Melinda Gates Foundation (BMGF) and Global Alliance for Vaccines and Immunization (GAVI).

"Biological E realized that the Pentavalent vaccine was the product of the future. We needed to develop and effectively combine Hepatitis B and Hib with our DTwP vaccine. We worked hard, and it paid off. In 2011, BioE successfully licensed the Liquid Pentavalent Vaccine (LPV) in India, and in 2012 it received the WHO prequalification. This milestone catapulted the company into a new era of growth," says the entrepreneur, adding, "We have supplied over 400 million doses of LPV to more than 80 countries and there isn't a country on this planet that hasn't introduced this critical vaccine in part because of our efforts."

With the whole world focussing on preventing and fighting COVID, there was a risk of other regular vaccination schedules being disrupted.

AFFORDABILITY FACTOR

The Hyderabad woman who made headlines for coming up with the country's first low-cost vaccine, Corbevax, says, "The efficiencies gained in large-scale manufacture that contributes to the overhead costs (manpower, CAPEX, utilities, maintenance, testing) being spread over a larger number of vaccine doses because of our huge scale, gives us the opportunity to provide the vaccines more cost-effectively. Apart from this, we worked on a mechanism of pricing to pass on the benefit gained out of the funding by CEPI, BIRAC and COVID Suraksha. We believe this can greatly help the government-led initiative of vaccination and ensure availability of vaccines to the poorest."

THE FAMILY BUSINESS

With no science background, Mahima had no plans to take over the family-owned business.

"When I decided to take up business administration for under-graduation, it felt like the right thing to do, and I have no qualms admitting that it was also because I knew I didn't want to take up medicine or engineering. I wanted some good experience and figure out how I could contribute to society."

She says with time, she was drawn towards the vaccine side of the business because of how impactful the work was. "It gave some purpose to my life," she says, adding, "I feel proud that 1 in 2 children in the country are using our vac-

cines and we are helping governments across the world introduce new lifesaving vaccines for their children, because we make it cost-effective to do so."

Personally, I can't think of a better way to spend my life," says Mahima, who absolutely loves everything about her work. "I love the challenge and opportunity for learning, introspection and personal growth it has provided me over the years. At the end of the day, how many people can say the work I do contributed to saving lives? I can never be grateful enough for the opportunity it has provided our family and the chance we have got to create livelihoods and empower others," she says.

FAMILY SUPPORT SYSTEM

Mahima considers her father her mentor: "I look up to a lot of people and we have an excellent scientific advisory board to help us navigate important decisions, not to mention a great leadership team whom I'm constantly learning from," she says.

The business magnate believes that everything in life is so much harder without the right support system. Unfortunately, not everybody has it. "In my case, I am incredibly lucky. My sisters Purnima and Indira are the wind beneath my wings and I don't know what I would do without them. My family is unconditional in their support and it actually makes me feel even more responsible for their faith in me," she says.

She credits her success to parents and family. "And my success is also undoubtedly a result of my colleagues' efforts and the leadership team at the company. My job is only to facilitate the execution of their ideas."

It's also because of the more obvious things like investing in the right things at the right time, lots of hard work and lots of luck & blessings."



"I DIDN'T AUTOMATICALLY ASSUME THAT SOMEDAY I WOULD END UP IN THE FAMILY BUSINESS. WE WERE FORTUNATE THAT OUR PARENTS DIDN'T RAISE US TO BE ENTITLED. THEY ALWAYS IMPRESSED ON US TO DO SOMETHING WE LOVED BUT ALSO SOMETHING THAT WAS IMPACTFUL. THEY NEVER PRESSURED US TO DO ANYTHING."



HARD WORK PAYS OFF

"WHEN WE BEGAN THE JOURNEY, OUR PRIMARY FOCUS WAS TO ENTER THE MARKET AT A SCALE WHERE WE CAN MAKE A POSITIVE IMPACT. WE WANTED TO DEVELOP A PRODUCT THAT IS IMMUNOGENIC, AFFORDABLE AND EXTREMELY SAFE. IT WAS DEFINITELY UNPRECEDENTED, AS WE WERE TRYING TO DO SOMETHING THAT TYPICALLY TAKES 5-7 YEARS, IN A SPAN OF 12 MONTHS. AND I MUST SAY THAT THE HARD WORK HAS PAID OFF AND WE HAVE ACHIEVED WHAT WE SET OUT TO DO."

Coronavirus: COVID's Omicron variant is three times more transmissible than the Delta,

Coronavirus: COVID's Omicron variant is three times more transmissible than the Delta, warns Union Health Ministry (The Times of India:202101229)

<https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/coronavirus-covids-omicron-variant-is-three-times-more-transmissible-that-the-delta-warns-union-health-ministry/articleshow/88451133.cms>

As the new Omicron variant spreads like wildfire, health officials remain on high alert. As per WHO estimates, at least 95 nations, including Britain, the United States of America, Denmark and Norway have been affected by the new variant. In India, 236 cases of Omicron have been reported in India so far. Amid such chaos, the Centre on Tuesday said that the new COVID variant Omicron is three times more transmissible than the Delta variant.

"Based on current scientific evidence, the Variant of Concern Omicron is at least 3 times more transmissible than the Delta Variant. Besides, the Delta VOC is still present in different parts of the country. Hence, even greater foresight, data analysis, dynamic decision making and strict & prompt containment action is required at the local and district level," the ministry said in a letter to the states and UTs.

Read also: Coronavirus: Is there a possibility of a third wave hitting India? We weigh in

The Centre has asked states to review the emerging data of Covid-19 affected population, geographical spread, hospital infrastructure and its utilisation, manpower, notifying containment zones, and enforcement of perimeter of containment zones at the district levels. It has called for formulating a strategy that can ensure infection is contained at the local level itself before it spreads to other parts of the state.

The states have been advised that the main elements of the framework to be used should be based on the test positivity rate of 10 per cent or more in the last one week and on bed occupancy of 40 per cent or more on oxygen supported or ICU beds. The states have been asked to focus on containment, test, track, surveillance, clinical management, vaccination and Covid Appropriate Behaviour as strategic areas of intervention.

Union Health Secretary Rajesh Bhushan, in the letter, has asked states and UTs to activate the war rooms and keep analysing all trends and surges, no matter how small and keep taking proactive measures at the district or local level.

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India's Covid-19 vaccination drive

India's Covid-19 vaccination drive is the first such large-scale programme for adults in the country. But its history of free mass immunisation campaigns dates back to the second half of the 19th century(The Times of India:202101229)

<https://timesofindia.indiatimes.com/india/explained-vaccination-in-india-has-always-been-free/articleshow/83806003.cms>

Much has been written and debated about the centralised free Covid-19 vaccination policy that's underway, from the estimated additional cost burden of around Rs 10,000 crore to the demand-and-supply equation.

While matters like feasibility and state rollout efficiency are still unclear, Day 1 of the revised norms appears to have underscored one truism: Indians love anything free. Over 85 lakh jabs were administered on June 21, the highest in a single day since the world's biggest vaccination drive began on January 16. That's more than double the number of people inoculated the previous day while the previous single-day record was of over 48 lakh doses on April 1.

According to experts, while the Covid-19 vaccination drive is unique as the first such large-scale programme for adults in India, the country actually has a long history of free mass immunisation campaigns. It goes back all the way to the second half of the 19th century, when the British Raj made the smallpox vaccine available to the general public free of cost. At that time, the disease accounted for over 10% of all deaths in the country. Although the smallpox vaccine reached India in 1802, within four years of Edward Jenner's discovery, its rollout in India was initially slow since few people wanted to pay for it.

New Cases

India reports 6,987 Covid cases, 162 deaths in 24 hours; Omicron tally 422 (Times of India:202101229)

<https://timesofindia.indiatimes.com/india/india-reports-6987-covid-cases-162-deaths-in-24-hours-omicron-tally-422/articleshow/88501118.cms>

NEW DELHI: India reported 6,987 new Covid-19 cases and 162 deaths in the last 24 hours, the Union health ministry said on Sunday. With the new daily infections, India's total caseload has increased to 3,47,86,802, according to the data updated at 8am.

According to Union health ministry data updated on Sunday, India's Omicron tally currently stands at 422. Cases of the new variant have been detected across 17 states and Union territories in the country so far.

Meanwhile, the daily rise in coronavirus infections has remained below 15,000 for the last 59 days now.

India's active caseload is presently at 76,766. Active cases constitute 0.22 per cent of the country's total positive cases, which is the lowest since March 2020.

The Covid-19 death toll has climbed to 4,79,682 with 162 new fatalities in the last 24 hours.

The number of people who have recuperated from the viral disease surged to 3,42,30,354, while the case fatality rate was recorded at 1.38 per cent.

The cumulative doses administered in the country so far under the nationwide Covid-19 vaccination drive has exceeded 141.37 crore.

'Omicron can displace Delta'

'Omicron can displace Delta': study suggests Omicron enhances neutralising immunity against Delta(Times of India:202101229)

<https://timesofindia.indiatimes.com/world/rest-of-world/south-africa-study-suggests-omicron-enhances-neutralising-immunity-against-delta/articleshow/88540072.cms>

Research by South African scientists suggests that Omicron infection enhances neutralising immunity against the Delta variant of the coronavirus.

The study, which has not been peer-reviewed, found that people who were infected with Omicron, especially those who were vaccinated, developed enhanced immunity to the Delta variant.

The analysis enrolled 33 vaccinated and unvaccinated people who were infected with the Omicron variant in South Africa.

While the authors found that the neutralization of Omicron increased 14-fold over 14 days after the enrollment, they also found that there was a 4.4 fold increase of Delta virus neutralization.

"The increase in Delta variant neutralization in individuals infected with Omicron may result in decreased ability of Delta to re-infect those individuals," the scientists said.

Alex Sigal, a professor at the Africa Health Research Institute in South Africa, said on Twitter on Monday that if Omicron was less pathogenic as it looked from the South African experience, "this will help push Delta out".

According to an earlier South African study, there is reduced risk of hospitalisation and severe disease in people infected with the Omicron coronavirus variant compared with the Delta one, though the authors say some of that is likely due to high population immunity.

The Omicron variant, first detected in southern Africa and Hong Kong in November, has since spread worldwide and threatened to overwhelm hospitals and disrupt travel plans this holiday week.