



## Ayear After Covid, Call For 'One Health' Approach



On March 11 last year, the World Health Organisation labelled Covid-19 a 'pandemic'. And the last 12 months have been described as unprecedented and surreal, as cities locked down and air travel was grounded to break the transmission chain of SARS-CoV-2.

Efforts on the science and research front, too, have also been no less dramatic, when it comes to vaccine development, the repurposing of drugs, cross country collaborations, and 'at

risk' manufacturing that helped fill a pipeline of medical tools to tackle Covid-19.

But while the world community lauds the achievements, there's also a dark side when it comes to access to these various medical tools. Intellectual Property (IP) concerns and export bans have public health circles worried on the inhibiting effect they have on global supplies. And, there are questions on whether the world will build back better, as the WHO is urging countries to do.

According to the WHO vaccine landscape, there are 181 vaccines in pre-clinical development and 81 in clinical development. And a handful of them, including vaccines from Astra-Zeneca-Oxford University, Pfizer-BioNTech, Moderna, Gamaleya Institute, Sinopharm, Sionvac, CanSino and India's Bharat Biotech vaccines, are being actively rolled out in different countries.

Apart from vaccines, there has been work on diagnostic kits, and there's even a self-testing kit now in the basket of Covid-linked products. There are repurposed anti-virals and biosimilars, alongside older, less-expensive but effective drugs such as dexamethasone that are being used by doctors across the world to combat the virus.

But the bonhomie is being embittered by "vaccine nationalism", where governments are preventing the export of vaccines or raw materials, in an effort to support local producers to supply vaccines to their local population. This week, the WHO is engaging with Big Pharma and vaccine-makers to address shortages.

Also, developed countries stockpiled a lion's share of the vaccines available, leading to international voices calling for a more equitable distribution of vaccines across the world. On IP, even as some companies committed to not enforcing it during the pandemic, India and South Africa proposed a temporary IP waiver on Covid products, an effort to enhance access to countries that do not have a manufacturing base. This is still under discussion, but it has divided the world along largely predictable lines of developed and developing countries.

The lesson for the future is that governments need to tie-in supply commitments when they fund research of companies. With Covid-19, they even put money into manufacturing, point out health advocacy workers, calling for reduced prices on the products, irrespective of who picked up the tab.

A year on, as the world deals with virus variants, public health voices push for a 'one health' approach that addresses linkages between human health, farm practices, climate and the overall environment. With the virus reportedly having jumped from an animal to humans, there is the need for better management practices in handling animals and disease surveillance of humans and animals. (Source: Business Line)

## Food preservatives in Processed Foods Harm Body's Immune System: Study



Food preservatives present in the processed foods may harm the body's immune system, according to a new study.

The findings suggested that the preservative tert-butylhydroquinone, or TBHQ, can harm the immunity in both animal tests and in non-animal tests. TBHQ has been used in all kinds of foods. It offers no benefits besides increasing a product's shelf life. In the study, the research team found that TBHQ affected immune cell proteins at doses similar to those that cause harm in traditional studies.

"The pandemic has focused public and scientific attention on environmental factors that can impact the immune system," said researcher Olga Naidenko from the US-based Environmental Working Group.

"Before the pandemic, chemicals that may harm the immune system's defense against infection or cancer did not receive sufficient attention from public health agencies. To protect public health, this must change," Naidenko added.

For the study, the researchers used data from the Environmental Protection Agency's Toxicity Forecaster or ToxCast. They analysed the health hazards of the most common chemicals added to food, as well as the "forever chemicals" known as PFAS, which can migrate to food from packaging. They examined all publicly available studies that show how PFAS migrate to food from packaging materials or processing equipment. The study was published in the International Journal of Environmental Research and Public Health. (Source: Business Line)

## India to Start Vaccinating All Adults Over 18 Amid Surge In Infections



India has widened its vaccination programme as infections surge and the capital goes into lockdown.

All adults over the age of 18 will be offered a coronavirus jab starting from 1 May, the government said on Monday.

However, with vaccines in short supply in many states, it is unclear where the additional doses will come from. The government said last week that it only had 27 million doses - or enough jabs for nine days at current rates of vaccination.

India is currently vaccinating health workers, front line workers and people over 45, but a number of states - including the worst-affected Maharashtra state - have reported insufficient supply. There have been reports of people being turned away from vaccination centres in many areas.

Vaccine suppliers such as the Serum Institute of India have been unable to meet international requirements and have also warned of raw material shortages affecting production. The institute's CEO pointed to US export bans on specific items needed to make vaccines.

The process so far has been controlled by the federal government, but the government is changing the rules, a move it says will increase production and availability and attract more domestic and foreign players.

Vaccine manufacturers will now have to supply 50% of the doses to the central government and the rest to state governments and the open market at a pre-determined price.

Three vaccines were initially approved for use in India - two manufactured by Indian companies Serum Institute and Bharat Biotech, and the third Russia's Sputnik V. Since then, it has said that vaccines approved for use in other countries could also be used in India. The government has also approved a \$600m (£428m) grant for Serum Institute and Bharat Biotech. (Source:BBC)

## What to Do If You Think You Have Covid-19: India's Top Doctors Explain Symptoms & Precautions



With an aim to alert and advise citizens facing worrisome second wave of Covid-19, India's topmost doctors on Wednesday addressed key issues to alleviate fear among citizens on Covid-19 protocol. The virtual address was attended by AIIMS Director Dr Randeep Guleria, Narayana Health Chairman Dr Devi Shetty and Medanta Chairman Dr Naresh Trehan. All three doctors talked in detail about the symptoms of coronavirus, precautions need to be taken if tested positive, quarantine guidelines, use and supply of Remdesivir and oxygen in hospitals, etc.

India registered a record 2,95,041 new Covid-19 case in the last 24 hours and 2,000 deaths, the highest single-day tally for the country so far, Union Health Ministry data showed on Wednesday at 8am.

In the virtual address shared by news agency ANI, the doctors explained what to do if you test positive for Covid-19 infection. Here's what they said:

### Dr Devi Shetty

– If you have any symptom like body ache, cold, cough, indigestion, vomiting- I have one important message- get yourself tested for Covid-19. It is the most important thing.

-In case you are positive, see a doctor and get his opinion. Do not panic, Covid-19 is common now. It is a problem that can be solved provided you get the medical help at an early stage and follow doctor's instructions.

– There is a possibility that you may be asymptomatic, then, doctors will tell you to stay at home, isolate yourself, wear a mask and check your oxygen saturation every 6 hours.

– If your O2 saturation is above 94 per cent then there is no problem. But if it is falling after exercise, then, you need to call a doctor. It is important you get the right treatment at the right time.

### Dr Naresh Trehan

– Less percentage of people require hospitalisation. The hospital beds should be utilised judiciously and with responsibility. This responsibility rests on all of us.

– We have now made a protocol that Remdesivir to be given not to everyone who tests Covid-19 positive. Only after doctors look at test results, symptoms, comorbidities of a patient, then, it is to be given. Remdesivir isn't a 'Ramban', it only decreases viral load in people who need it.

– Today, we have enough oxygen if we try to use it judiciously. I want to tell the public that if you don't need oxygen then don't use it as a security blanket. Waste of oxygen will only lead to depriving someone who needs it.

### Dr Randeep Guleria

– In Covid-19, more than 85 per cent of people will recover without any specific treatment in the form of Remdesivir etc. Most will have symptoms like common cold, sore throat etc. Over 5-7 days, they will recover with symptomatic treatment. Only 15 per cent may go to moderate disease.

– Important to understand that most of us who in home isolation or in the hospital because panic don't actually need any specific treatment. Only small percentage require Remdesivir. Don't consider this as a magic bullet.

– As a country, if we work together, use oxygen and Remdesivir judiciously, then, there will be no shortage anywhere. In terms of the number of people who need oxygen and oxygen supply, we are well balanced.

– Oxygen is a treatment, it's like a drug. Taking oxygen intermittently is an absolute waste of oxygen. There is no data that shows that this will be of any help to you and therefore you shouldn't do.

– The vaccine prevents you from getting the disease in the form of severe illness. It may not prevent you from getting the infection. Important to understand that even after the vaccine we may have a positive report, it is why important to wear a mask even after vaccine. (Source: News 18)

## Covaxin 78% Effective Against Mild to Severe Covid-19; Chances of Hospitalisation After Infection Post Jab Almost None: Bharat Biotech



Covaxin, a vaccine developed by Bharat Biotech, has demonstrated overall interim clinical efficacy of 78 per cent and 100 per cent efficacy against severe COVID-19, the Hyderabad-based company said on Wednesday announcing phase 3 interim analysis results of the vaccine.

The vaccine maker noted that the second interim data of the Phase III study also showed that chances of hospitalisation due to the infectious disease were reduced by 10 per cent after taking the Covaxin jab.

Due to the recent surge in cases, 127 symptomatic cases were recorded, resulting in a point estimate of vaccine efficacy of 78 per cent against mild, moderate, and severe COVID-19 disease, Bharat Biotech said in a statement. The efficacy against symptomatic COVID-19 infection was 70 per cent, suggesting decreased transmission in Covaxin recipients, it added. "Efficacy against SARS-Cov-2 has been established.

Covaxin has demonstrated an excellent safety record in human clinical trials and in usage under emergency use. Covaxin is now a global innovator vaccine derived from R&D in India," Bharat Biotech Chairman and Managing Director Krishna Ella said.

The efficacy data against severe COVID-19 and asymptomatic infections is highly significant, as this helps reduce hospitalisations and disease transmission, respectively, he added.

The protocols for manufacturing, testing and release of inactivated vaccines have been tried, tested and validated across several of company's vaccines. These also meet the requirements of WHO as well as Indian and other regulatory authorities, Ella said.

"These protocols have delivered consistent results over a 15-year period with more than 300 million doses supplied globally, with excellent safety and performance record," he added. Bharat Biotech said safety and efficacy results from the final analysis will be available in June.

The final report will be submitted to a peer-reviewed publication. The Phase III study for Covaxin enrolled 25,800 participants between 18-98 years of age, including 10 per cent over the age of 60, with analysis conducted 14 days post the second dose.

Covaxin has been developed with seed strains received from the National Institute of Virology. The Phase III clinical trial was co-funded by the Indian Council of Medical Research (ICMR), making it a public private partnership towards public health.

He tireless efforts of our scientists at ICMR and Bharat Biotech have resulted in a truly effective international vaccine of the highest standards and efficacy.

"I am also happy to note that Covaxin works well against most variants of SARS-CoV-2. These findings together consolidate the position of our indigenous vaccine in the global vaccine landscape," Secretary, Department of Health Research and ICMR Director General Balram Bhargava said.

Balram added that the firm's efforts to further develop COVAXIN would continue, with clinical trials planned in India and globally to evaluate its safety and immunogenicity in younger age groups, the impact of booster doses, and protection against SARS-CoV-2 variants.

Suchitra Ella, Joint Managing Director said capacity expansion has been implemented across multiple facilities in Hyderabad and Bangalore to approximately 700 million doses/year. (Source:News18)