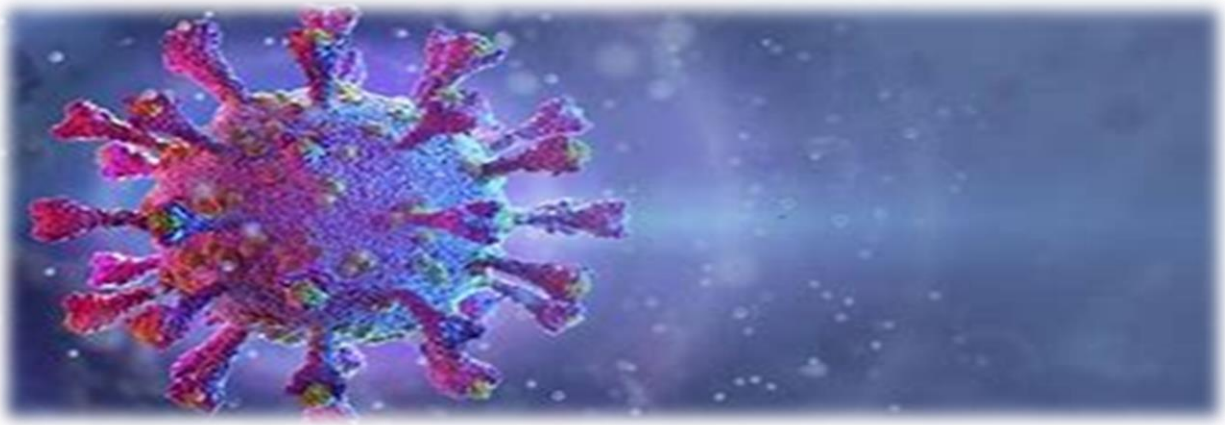
CORONAVIRUS NEWS BRIEF



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India's Mirabai Chanu wins silver as India get first medal at Tokyo 2020 Olympics

(Report on P. 02)

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Mirabai Chanu won India's first medal at the 2020 Tokyo Olympics after clinching silver in the women's 49 kg event on Saturday. This is India's first silver in weightlifting at the Olympics. Mirabai lifted a total of 202 kg.

India's only previous medal in weightlifting was won by Karnam Malleswari, a bronze at the 2000 Sydney Olympics. Mirabai, a former world champion, has now won medals at the Asian Championships, the Commonwealth Games, the World Championships and the Olympics.

China's Hou Zhihui, the current world record holder in the event, won gold with a total of 210 kg, setting a new Olympic record in the event, while Indonesia's Aisah Windy Cantika won bronze with 194 kg.

"I am very happy, I have been dreaming of this for the past five years. I am very proud of myself right now. I did try for gold but even silver is a great achievement for me," Chanu told reporters after winning the medal for which she had been training in the US for past few months. "I am very happy to win the first medal for India at these Games. I don't just belong to Manipur, I belong to the whole country," she added in response to a query on what it meant for her as a Manipuri.

Mirabai entered the competition at 84 kg in the snatch category and her first lift was successful. She then had another successful lift at 87 kg before failing in her third and final lift at 89 kg. In her preferred clean & jerk category, Mirabai's first two lifts at 110 kg and 115 kg were successful. Her final lift at 117 kg was unsuccessful but she was assured of a silver by then.

Mirabai's first major breakthrough came when she won silver in the 48kg category at the 2014 Commonwealth Games in Glasgow. At the age of 19, her total lift of 170 kg was only three kilos short of the gold-winning effort.

At the Rio Olympics in 2016, her nerves seemingly failed her as she managed just one clean lift in six attempts. A year later, however, Mirabai bounced back from Rio by winning gold at the Commonwealth Championships and then at the World Championships. She carried that form and confidence into the Commonwealth Games at Gold Coast in 2018, eclipsing her own national records in the process.

Soon after, Mirabai was struck by a back injury that left her out of action for almost 10 months. She returned in 2019, finishing just outside of the medals at the Asian Championships and the World Championships. At the 2020 Asian Championships, held in Uzbekistan in April this year due to the coronavirus pandemic, Mirabai set a new world record in clean and jerk (119 kg) on her way to bronze, further confirming her place at the Tokyo Olympics.

Tokyo isn't the first Olympics to battle a pandemic, but experts say 'everything pales in comparison'

COVID-19 has thrown more than few curve balls at Tokyo Olympic organizers -- but this isn't the first Games to battle a pandemic.

A century ago, the 1920 Antwerp Olympics were held only a few months after the Spanish flu ravaged the world, killing at least 50 million people. In 2010, the Vancouver Olympics were threatened by an outbreak of H1N1. In 2016, the Zika virus prompted calls to cancel the Rio Games. And most recently in 2018, officials in Pyeongchang wrestled with an outbreak of the norovirus. Mass gatherings like the Olympics, which bring together people from all over the world, have always posed a huge infectious disease risk. Visitors bring viruses that may not be endemic to the host country and may take viral souvenirs home to their own communities.

"The opportunities for the movement of infectious diseases are accelerated. We've seen this across Olympic Games, we've seen this in large gatherings like the Hajj or the World Cup," said Dr. John Brownstein, an epidemiologist at Harvard Medical School. To manage the risk, all Olympic host cities must have a public health plan.

Preparations begin several years earlier when officials start working with the Olympic Organizing Committee to form pandemic preparedness and epidemic surveillance plans. They start monitoring local infections to set a baseline and track viruses or any irregular infection patterns that could pose a threat.

But few Olympic organizers have had to contend with an outbreak of the size and severity of COVID-19. If nothing else, Tokyo 2020 will enter the record books as the Games that came closest to a last-minute cancellation due to rising case numbers.

Here's how other cities have fared:

The Spanish flu, Antwerp 1920

The world was still reeling from the deaths of tens of millions of people from the Spanish flu when some 2,600 athletes gathered in Antwerp to contest the 1920 Summer Olympics.

It was just two years after World War I and Belgium was still suffering food shortages. The country couldn't afford to build a pool so officials set up a wooden frame in a canal to host the swimming competitions.

Despite the less than desirable conditions, the Games went on without any major problems or outbreaks -- they were seen as a symbol of hope and unity in the post-war, post-pandemic world.

There is always the risk of diseases spreading as people travel, but another concern is the strain an outbreak could put on local health care systems, according to the World Health Organization (WHO).

A community could be prepared to manage an outbreak within its population but may struggle if that population has ballooned exponentially. In 2012, more than 8 million people attended the London Summer Games, doubling the city's population.

Foreseeing the risks, authorities began public health planning more than seven years ahead of the Games, according to a report published in the Lancet medical

journal. Together, they developed a public risk health assessment that would become the foundation of Olympic planning.

The UK already had a strong health care monitoring system, but extra surveillance was added for the Games, giving officials daily rather than weekly reports of illnesses and mortality across the country.

The report said officials had realized the urgency of reassuring the public at such a large event. Workers monitored social media to quickly counter rumors of illness with facts.

Public health surveillance methods were improved based on this analysis and would go on to become a legacy of London 2012. Similar risk analysis methods were also used in the planning of Rio 2016.

Zika, Rio 2016

Ahead of the 2016 Rio Olympics, talk was dominated by the Zika virus, a mosquito-borne disease primarily transmitted through the bite of an infected female Aedes aegypti mosquito.

Symptoms include fever, rash and joint pain, though a Zika virus infection during pregnancy can cause microcephaly, a neurological disorder that results in babies being born with abnormally small heads.

Several high-level athletes, such as pro golfer Rory McIlroy, dropped out of the competition due to concerns about the illness.

Before the Games, Brownstein's team created a map to model the potential transmission of the Zika virus from the Olympics -- Brazil was a hotspot and had declared a national public health emergency in 2015.

"We do mining of all these articles and social media posts looking for clues about disease events and different populations across many different languages," Brownstein said. "We use machine learning and AI to go through all that data, filter it, tag it, and then make it available to like WHO and CDC and others."

Researchers mapped areas highly susceptible to the virus, such as parts of Asia and Africa that have dengue outbreaks, countries sending the most athletes, as well as countries with the most travelers from Brazil.

Though the WHO said there were no confirmed cases of Zika among Olympics athletes or travelers, maps like this can help predict and prevent viral transmission ahead of mass gatherings. Though there were no confirmed cases of Zika at Rio, that doesn't mean there were no infections at all since most people don't show symptoms.

While Zika did not have an impact on the Olympics, it continued to torment poorer local communities for months to come. Researchers at UC Berkeley argued the seasonal patterns of diseases similar to Zika predicted Zika's decline ahead of the Games and the diversion of scarce resources to a relatively low-risk population -- wealthy tourists and athletes -- instead of those who were in dire need of them, could have been avoided.

Swine flu, Vancouver 2010

In June 2009, seven months before the start of the Vancouver 2010 Winter Games, the WHO declared H1N1 -- also known as swine flu -- a pandemic.

There were more than 33,000 cases of H1N1 and 428 deaths in Canada during the 2009-2010 flu season, according to Infection Prevention and Control Canada.

"It seems so long ago now, but I remember in the fall of 2009 there were high level discussions about the impact this might have on the Games, and it doesn't seem real now, but at the time, it was very real," said Rob Stewart, Medical Services Operations Manager of Vancouver 2010.

Though the pandemic had largely subsided by the start of the Games, officials were still on high alert.

Public health was considered in every part of the planning process from venue design, setting up hand washing facilities and proper sanitation, to public messaging on cough etiquette and social distancing. Spectators and athletes who weren't able to get vaccinated at home were given free H1N1 jabs on site.

"Every day we could communicate with public health at about 11 o'clock at night and we'd get the stats for the day and then we would go over them," said Dr. Mike Wilkinson, Director of Medical Services at **Vancouver 2010.**

Daily briefing documents included everything from immunization levels to air quality to any infectious disease outbreaks in the region.

"Influenza activity throughout the region remains well below historical norms. Other respiratory viruses predominate. Drinking water quality data supports tap

water as the best choice for visitors and residents," reads a Health Watch report from February 2, 2010, 10 days befre the start of the Games.

Ultimately no athletes caught H1N1 at the Vancouver Games. "It's always said of the Games, if I'm the chief medical officer and I'm the one looking around as if I'm not doing anything that means that I've done a good job," said Wilkinson.

Norovirus, Pyeongchang 2018

Similar precautions were taken in the Pyeongchang 2018 Winter Olympics, where officials battled a norovirus outbreak.

Just days before the opening ceremony, norovirus -- an extremely contagious stomach bug -- spread among security staff at an Olympic accommodation facility, infecting 41 guards.

A total of 1,200 security guards were put in quarantine to limit the spread while testing was conducted. "That's the trick, to catch it early enough," said Stewart, from Vancouver 2010. "Isolate the people that are sick and they stay there. By the time you're looking at a whole team, you're probably quite far down the road. The trick is to catch it right away."

The quarantined staff were quickly replaced with 900 military personnel from South Korea's conscripted army, who had been on standby with extra manpower as part of the contingency plans.

"That is the key of this success, communication among different interest groups is the essential part of the success of the prevention of epidemic outbreak," said Dr. Young-Hee Lee, Chief Medical Officer of **Pyeongchang 2018.**

Ahead of the Tokyo Olympics, medical officers from previous Games have been sharing their experiences and advice with the current organizing committee, though they admit it's a completely different ball game this time around.

"Everything pales in comparison to what they are having to do now in Tokyo," said Wilkinson, but he said virus surveillance and containment methods remain largely the same.

"We know what works, what historically has worked," he said -- personal hygiene, social distancing, masking, cough etiquette and vaccinations are the foundation of that. Stewart added: "You plan for the worst and hope for the best."

UN: COVID hitting poor and conflict nations worse this year

By EDITH M. LEDERER, Associated Press

Paska Itwari Beda, the young mother of five children, shares a meal with her family at her Juba, South Sudan home, Thursday, May 27, 2021. The young mother of five children - all of them under age 10 - sometimes survives on one bowl of porridge a day, and her entire family is lucky to scrape together a single daily meal, even with much of the money Beda makes cleaning offices going toward food. (AP Photo/Adrienne Surprenant)

The COVID-19 pandemic is hitting conflict-ridden and impoverished countries much worse this year than in 2020, with many facing higher caseloads and rising deaths, the U.N.'s deputy humanitarian chief warned.

Ramesh Rajasingham said in a closed briefing to the U.N. Security Council that these surges are being fueled by a lack of access to vaccines, an easing of public health measures, increased social mixing, and the spread of the delta variant to at least 124 countries, including 17 fragile and conflict-affected nations.

"This pandemic is far from over," he said. "We are arguably in one of the most dangerous periods for the poorest people on our planet."

In his briefing obtained by The Associated Press, Rajasingham said that so far in 2021 almost three-quarters of countries needing humanitarian aid have recorded more cases or deaths than in all of 2020. And in over one-third of those countries, he added, "at least three times more cases or deaths have been recorded this year compared to last."

He called these numbers "just the tip of the iceberg," saying that testing capabilities in many of these countries are inadequate so the U.N. doesn't have "a true sense of the actual scale of the crisis."

"Today, we have a two-track pandemic -- one trajectory for the rich world, and one for the poor -- characterized by dramatic differences in vaccine availability, infection rates and the ability to provide policy support," he said.

Rajasingham urged the international community to respond by ensuring that the poorest countries have access to protective equipment, oxygen, testing kits and other critical supplies. To tackle the pandemic and the worsening impact on the poorest people, he said, the global humanitarian system is appealing for $36 billion to help 161 million people.

Rajasingham said fragile and conflict-affected countries also must have access to vaccines. To date, he said, 80 million vaccine doses have been delivered to countries where the U.N. has appealed for humanitarian assistance.

The World Health Organization has set a goal of vaccinating 10% of the population of every country by September, he said. Rajasingham said to meet that goal, the U.N. estimates countries needing humanitarian assistance will require 162 million additional doses.

The U.N. anticipates more vaccine doses becoming available in the second half of 2021, but Rajasingham said vaccines alone are no enough.

He urged international support to enable the delivery of vaccines in impoverished and conflict-torn countries before their expiration date, saying this must include recruiting and training health workers and putting in place logistics and security to reach remote locations and people living in regions controlled by armed groups.

"Vaccine doses are essentially useless without effective delivery systems," he said.

"Almost half of the countries with humanitarian appeals have administered less than 50% of the doses delivered to them," Rajasingham said.

"For example, in South Sudan, vaccines could not be administered because funding was not available for the rollout."

The Security Council was meeting to discuss implementation of a resolution adopted in February that demanded a "sustained humanitarian pause" in all conflict areas to enable access to vaccines. It also called for "equitable and affordable access to COVID-19 vaccines in armed conflict situations, post-conflict situations, and complex humanitarian emergencies."

Since its adoption, Rajasingham said, the most fragile countries have not received sufficient quantities of vaccines or help.

"To date, the level of effort to end this pandemic has been inadequate," he said. "More must be done."

Learning to live with the virus

Governments across the world are moving away from a cautious approach and instead encouraging people to transition to the new normal, and return en masse to offices and restaurants.

Increasingly, the message is the same: We have to learn to live with the virus.

This week, England removed nearly all virus restrictions. Germany is allowing vaccinated people to travel without quarantine. Outdoor mask mandates are mostly gone in Italy. Shopping malls are open in Singapore. And countries with zero-Covid policies — like Australia — are rethinking them.

In Asia, Europe and the Americas, officials are coming to terms with the idea that lockdowns and restrictions will need to be reimposed and lifted as needed. They are now encouraging people to focus on avoiding severe illness and death, instead of infections, which are harder to avoid.

Singapore is planning a shift to monitoring severe illness instead of infections, citing Israel as a model, which has pivoted to "soft suppression." Both have recently seen a sharp rise in cases.

Some scientists are warning that it may be too soon. Read countries taking shortcuts on their way to reopening were putting unvaccinated people at risk and gambling with lives.

Scientists say that Covid-19 should not be treated like the flu, because it is far more dangerous, and we still don't fully understand the long-term symptoms of the disease. They are also uncertain how long vaccine immunity will last, and how well doses protect against the variants.

The virus is also raging in the developing world; only 1% of people in low-income countries have received a vaccine dose, according to the Our World in Data. That gives the virus a greater opportunity to rapidly replicate, which increases the risks of more mutations and spread — and as more transmissible variants, like Delta, emerge, it's putting even wealthy nations with lots of vaccines at risk.

(Editor's note:

Please use your common sense to donate to the right organization. If possible, give priority to your own family, neighbors and your village/Town or area healthcare systems directly. There are fraudulent organizations be aware of them. Cheque the need and response to those priorities. Get some advice from your Doctors or helping organizations. Many time Cash Donations are more effective than kind. I would recommend donating to Red Cross of India, UNICEF, Oxfam India, and Care India. In my personal opinion, do not send any contributions to India's Prime Minister Narendra Modi's PM Care Fund as its not transparent and has no accountability. -Kaushik Amin.)

The 'other' cost of Covid-19

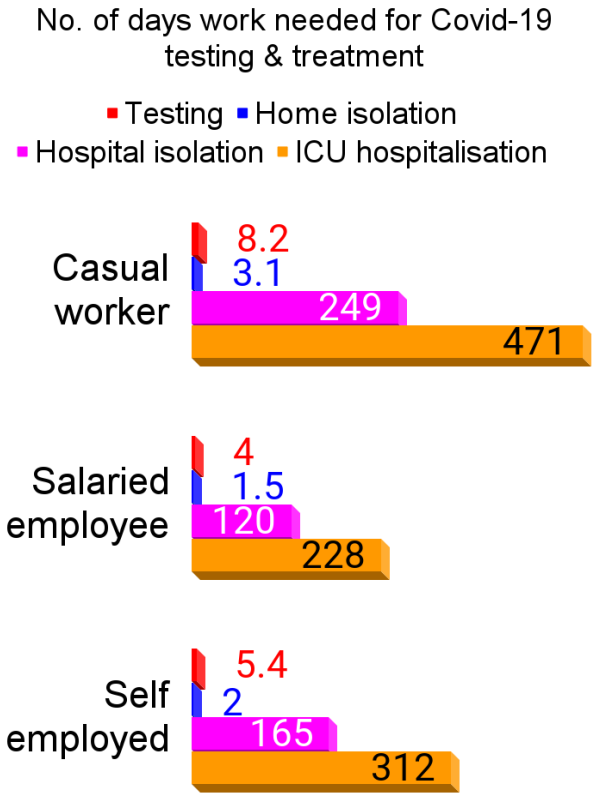
While the human cost of Covid-19 in India, in terms of lives lost, is incalculable, the financial cost too has been equally, if not more, damning, with Indians collectively spending Rs 64,000 crore on testing and treatment.

Says who? And what?

A paper by Public Health Foundation of India in association with Duke Global Health Institute, which is still in the pre-print stage, analysed testing and treatment costs between April 2020 and June 2021 and found that expenses incurred in an ICU exceeded the annual income of 86% of casual workers, more than 50% of the salaried and of two-thirds of those who are self-employed.

The study also found that even in the case of isolation or quarantine in a hospital, the cost was more than the annual income of 43% of casual workers, 25% of the self-employed and 15% of the salaried workers. Even testing for Covid-19 was an expensive affair, with the cost of Rs 2,200 for an RT-PCR test — which was more reliable to ascertain a person's Covid-19 infection status — equal to one week's earnings for a casual worker.

Importantly, the study only takes into account the "average of the capped prices announced by the various state governments," says Sakthivel Selvaraj, the lead author of the study who adds that since most price caps were openly flouted by the hospitals, especially private ones, "the actual cost could be much higher than the estimate."



The flip side of capping prices

According to a study published in the British Medical Journal (BMJ) last year, even the price caps fixed for private hospitals were too high for a majority of Indians. Delhi, for instance, had a price cap of Rs 10,000 per day for covid-19 patients needing beds and PPE kits, Rs 15,000 a day for ICU and Rs 18,000 daily for those requiring ventilator support.

Even so, the BMJ study found, most private hospitals were charging much more due to lax enforcement. Not just that, due to the price cap, several patients who had health insurance found to their dismay that insurance companies would only pay upto the price cap, leaving the balance amount, which often constituted close to 70% of the total hospitalisation expenses, to be paid by the patients.

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NO END TO THE PANDEMIC ANYTIME SOON, SAYS WHO

The World Health Organization (WHO) said that the Covid-19 pandemic is unlikely to end this year and could possibly be "under control next year."

However, that too would happen "if we're really lucky", according to Dr Mike Ryan, executive director of WHO's health emergencies program.

Ryan added that the process could be speeded up if vaccines were distributed equitably to economically disadvantaged nations and Covid-19 protocols, such as social distancing were followed along with funding of more healthcare facilities, including hospitals.

Adding that the Delta variant, first detected in India and which is now causing a major spike in cases across the world, will not be "the last variant of concern you hear us talking about", WHO's Covid technical lead Maria Van Kerkhove said there existed a strong possibility of new variants leading to a surge in breakthrough cases.

Already in the last seven days, four out of the six WHO regions have recorded an uptick in Covid-19 deaths — Western Pacific by 10%, Southeast Asia by 12%, Eastern Mediterranean by 4% and a continuous rise in Covid-19 fatalities in the African region.

Cases too have been mounting, with Europe seeing a near 21% rise in the last week while Southeast Asia's fresh Covid-19 cases rose by 16.5%.

Figures for Western Pacific and Eatern Mediterranean were 30% and 15% respectively.

Adding that the risks of the emergence of a more dangerous variant are high as social mixing continues unabated even as vaccination numbers stagnate, Ryan warned that "everything you do in a pandemic either increases or decreases risk, there's no zero risk, it's about minimizing the risk."

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Johnson & Johnson Covid-19 vaccine

Benefits 'far outweigh' risks: CDC

The benefits of the Johnson & Johnson Covid-19 vaccine far outweigh its potential risks amid an ongoing review of reports of a rare neurological disorder, according to an advisory panel to the US Centers for Disease Control and Prevention (CDC) on Thursday.

There have been 8.1 cases of Guillain-Barre syndrome per 1 million doses, which is higher than expected in the general population and close to eight times the rate seen in Pfizer's and Moderna's shots, according to data presented at a meeting of CDC's Advisory Committee on Immunization Practices on Thursday.

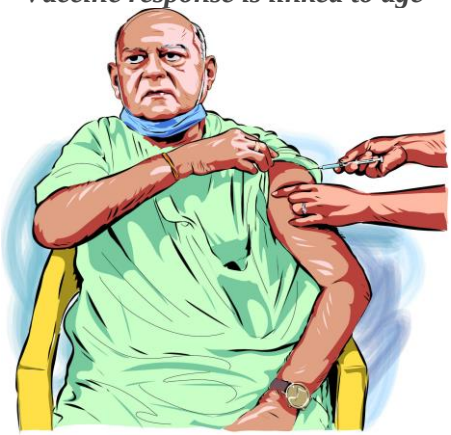
Guillain-Barre is a neurological disorder in which the body's immune system damages nerve cells, causing muscle weakness an sometimes paralysis, according to the US Food and Drug Administration (FDA).

The data came after the US Food and Drug Administration (FDA) announced a new warning on July 12 for the Johnson & Johnson shot after preliminary reports of Guillain-Barre syndrome in some recipients, the Xinhua news agency reported.

About 100 preliminary reports of Guillain-Barre syndrome have been detected in vaccine recipients after the administration of 12.8 million doses of the Johnson & Johnson vaccine in the US, according to the FDA. Of these reported cases, 95 were serious and required hospitalization, and one was dead.

CORONAVIRUS: NEWS FROM AROUND THE WORLD:

**** Vaccine response is linked to age***



A new study from Oregon Health and Science University (OHSU) suggests that older people appear to have fewer antibodies against the coronavirus.

Antibodies are blood proteins that are made by the immune system to protect against infection. They are known to be key players in protection against SARS-CoV-2 infection. "Our older populations are potentially more susceptible to the variants even if they are vaccinated," said senior author Fikadu Tafesse, Ph.D., assistant professor of molecular microbiology and immunology in the OHSU School of Medicine.

Researchers measured the immune response in the blood of 50 people two weeks after their second dose of the Pfizer vaccine against Covid-19. They grouped participants into age groups and then exposed their blood serum in test tubes to the original "wild-type" SARS-CoV-2 virus and the P.1 variant (also known as gamma) that originated in Brazil.

The youngest group — all in their 20s — had a nearly seven-fold increase in antibody response compared with the oldest group of people between 70 and 82 years of age. In fact, the laboratory results reflected a clear linear progression from youngest to oldest: The younger a participant, the more robust the antibody response.

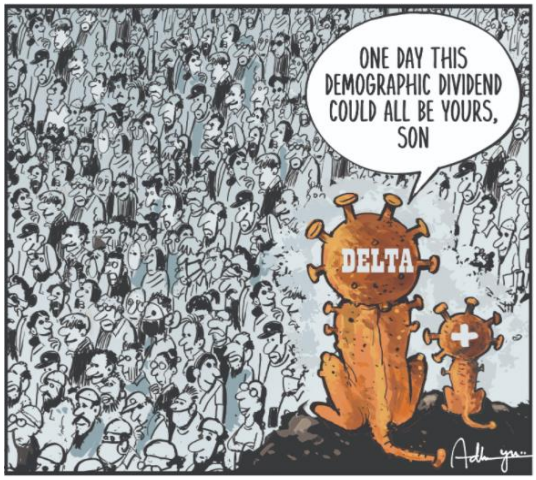
The findings highlight the importance of vaccinating older people as well as others who may be more vulnerable to Covid, said co-author Marcel Curlin, M.D., associate professor of medicine (infectious diseases) in the OHSU School of Medicine.

**** Just how dangerous is the delta variant?***

Two health experts from the US have sounded a warning about the Delta variant of SARS-CoV-2, asking people not to underestimate its risk.

Briefing reporters on Thursday, the Director of the US Centres for Disease Control and Prevention (CDC), Dr Rochelle Walensky warned that the Delta variant, which was first detected in India, "is one of the most infectious respiratory viruses we know of, and that I have seen in my 20-year career."

A recent joint Chinese and British study on the Delta variant found that the viral load carried by people infected with this strain in their nasal passages was about "1000 times higher than that of the 19A/19B strains infections back in the initial epidemic wave of 2020." This, as the study pointed out, suggested a "potential faster viral replication rate and more infectiousness of the Delta variant at the early stage of the infection."



Currently in the US, the Delta variant has caused a spike in daily new cases, which averaged 37,674 a day in the last seven days — representing a 53% increase over the week before. Even hospitalisations, at 3,500 per day, are up 32% over the week prior to that while deaths have increased 19% to 240 per day in the same period.

Added to that is the stagnation in US' vaccination rates, which is giving an impetus to the Delta variant to spread unchecked — with 97% of people admitted into hospitals being unvaccinated while 99.5% of all Covid deaths were among the unvaccinated.

Echoing Walensky's concerns, Dr Ashish Jha, Dean of Brown University's School of Public Health said "people are underestimating how bad this is going to get" and cautioned that the US was "in for a very tough August, probably a very tough September before this really turns around." He said the peak might occur in September, adding that if it were winter, the infection rate could be a lot worse.

**** China rejects calls for second Covid origin probe:***

Beijing on Thursday shot down the World Health Organisation's (WHO) proposed second phase of investigation into the origins of the novel coronavirus saying that it "will not accept such an origins-tracing plan as it, in some aspects, disregards common sense and defies science."

According to Zeng Yixin, vice minister of the National Health Commission (NHC), the country was "surprised" to see the inclusion of the lab leak theory — which claims that SARS-CoV-2 was leaked from a lab at the Wuhan Institute of Virology — as a research objective by the WHO.

Interestingly, the Chinese team leader on the WHO joint expert team Liang Wannian, who said that "a lab leak is extremely unlikely and it is not necessary to invest more energy and efforts in this regard" added that the theory couldn't be dismissed entirely.

Even the experts on the WHO joint team which had released the report of its first investigation into the origins of Covid-19 in March had said that "a true forensic examination" of the lab leak theory had not been done, leading to a number of Western countries, including the G7 nations, questioning the report's thoroughness.

****Anxiety is also causing post-vaccination adverse events***

A little over half of 60 serious post-vaccination adverse events were triggered by anxiety, a causality assessment study by a government panel found.

According to the report by the National Adverse Events Following Immunization (AEFI) Committee, of the 60 adverse events it studied, 36 were related to anxiety, 18 were vaccine-related and one was classified as both vaccine-related and anxiety-related. Five cases, including a death, had an inconsistent causal association to vaccines.

Women showed more anxiety post-vaccination, the study said. "The fear of needles is resulting in anxiety and hesitancy as well. We have to see how to overcome needle phobia," a senior official told the Economic Times.

The committee included medical specialists, cardiologists, neurologists, pulmonary medicine specialists, and obstetrician-gynecologists.

****Over 200 drugs, nearly 69 therapeutic agents:***

Covid-19 is emerging as perhaps the first pandemic in history for the treatment of which over 200 drug compounds have been tested and nearly 69 therapeutic agents subjected to clinical trials so far.

A research study involving scientists, including those from the National Institute of Pharmaceutical Education and Research, Hyderabad, has revealed that as many as 265 clinical trials were conducted to find a suitable treatment for the coronavirus and among them, 115 have been shown to have direct effect on reducing the viral load and managing the disease. Interestingly, except for the vaccines, all the drugs tested so far are old medicines and repurposed for Covid with varying degrees of success.

A plethora of antiparasitic and antiviral drugs, monoclonal antibodies, vaccines and stem cell therapies were tried as part of well-designed clinical trials. Apart from vitamin C, vitamin D supplementation has been found to be useful in reducing the risk. The latter lowered viral replication rates, controlled pro-inflammatory cytokines production responsible for lung injuries and also managed the risk of influenza.

Per the study, antimalarial drugs like chloroquine diphosphate and hydroxychloroquine, antiviral drugs like Ritonavir and Lopinavir, Interferon (recombinant), Favipiravir, Baloxavir, Darunavir, Ganovo, ASC09/Ritonavir, Arbidol hydrochloride, Carrimycin and Triazavirin, corticosteroids like Methylprednisolone, stem cells involving mesenchymal stem cells from umbilical cord, blood plasma from umbilical cord, blood mononuclear cells and immunomodulators like recuperative plasma, and monoclonal antibodies like Tocilizumab, Adalimumab, Ixekizumab and Camrelizumab were tested. Doctors also tested drugs like Remdesivir and Heparin.

****If Mumbai can, why can't Centre do door to door vaccination: Bombay HC:***

The Maharashtra government on Tuesday informed the Bombay High Court that it has formulated a policy for door-to-door Covid-19 vaccination in Mumbai and will start it from August 1, on an experimental basis.

What the state will do?: According to a survey undertaken by the state government, more than 3,500 people living in the jurisdiction of Brihanmumbai Municipal Corporation (BMC) had expressed a desire to be vaccinated at home. The state's willingness to offer doorstep delivery and administration of vaccines is a complete turnaround from its earlier stance wherein it had cried off from doing door-to-door vaccination as it said it needed the Centre's approval — which was frowned upon by the high court. The decision to start door-to-door vaccination came after the court heard a PIL seeking at-home vaccination for those aged 75 and above, as also for the specially-abled and the bedridden. **A tick-off:** The high court was also unsparing in its criticism of the Centre, observing in its order that "the Union did not rise to the occasion.

However, the State did and showed the light at the end of the tunnel."
The Centre had earlier in June, informed the high court that it couldn't conduct door-to-door vaccination as it was "not practical or possible." One of the major issues facing door-to-door vaccination is the logistical challenge of transporting vaccines at a low temperature to keep them stable, as also the post-vaccine observation for half an hour and the increase in number of vaccinators.
The Centre had however added that its national policy of not conducting door-to-door vaccination was an advisory as some states and UTs, including Kerala, Odisha, Jharkhand and Jammu and Kashmir were already doing it, as noted by the court.

What the Centre said on vaccines and oxygen shortage:

On vaccines: Health minister Mansukh Mandaviya said in parliament on Tuesday that Serum Institute of India (SII) was in a position to supply 11-12 crore doses a month, while Bharat Biotech will produce 2.5 crore doses in July and 3.5 crore doses in August. It's another matter that such was the shortage of vaccines that even the national capital Delhi ran out of Covishield stocks just a week back.
On oxygen shortage: Minister of State for Health Bharati Praveen Pawar informed the Rajya Sabha on Tuesday that there were no deaths during Covid-19's second wave due to oxygen shortage. Pawar said that since health is a state subject, "no deaths due to lack of oxygen have been specifically reported by states and UTs." Oxygen demand during the second wave had tripled to 9,000 tonnes, from 3,095 tonnes in the first wave. It's another matter that there were at least close to 300 documented deaths due to shortage of oxygen by the second week of May.
And on the infection front...
The fourth sero survey by the Indian Council of Medical Research (ICMR), conducted in June-July, found that more than two-thirds of India's population — 67.6% — had SARS-CoV-2 antibodies.
The sero survey included even children above the age of 6 years, which makes it the most comprehensive survey done so far. Conducted in 70 districts, the survey detected a sero-positivity of 57.2% in children aged 6-9 years; 61.6% in the 10-17 year age group; 66.7% in the 18-44 year age group; and 77.6% in the 45-60 year age group.
The survey also sounded a note of caution, saying that one third of India's population or about 40 crore people who did not have antibodies against Covid-19 were still vulnerable to the infection.

In a Race against an Ever-Changing Virus, Humans Losing Ground:

A year ago, scientists looking at the future of the COVID-19 pandemic felt optimistic. Vaccine development was zooming toward unprecedented achievement. And unlike the viruses that cause the flu or AIDS, they thought, this virus couldn't mutate to evade the fully primed human immune system.
"Thankfully, SARS-CoV-2 does not seem to have evolved any such tricks yet — suggesting that we still have an opportunity to stem its spread and the pandemic by pursuing a relatively straightforward vaccine approach," wrote two Yale University immunologists in a July 31, 2020, essay for The New York Times.
Those were the days.
Since then, the United Kingdom, South Africa, India, and Brazil have all discovered "variants of concern" — mutant strains that spread more easily and may cause more severe illness.
The new kid on the block, the Delta variant first detected in India, appears to be far more contagious than its original cousin. It is quickly becoming the dominant source of new COVID-19 cases everywhere, causing an uptick in new cases even where large percentages of the population have been vaccinated.
At the same time, the effort to vaccinate the whole world is hitting such significant barriers that the hope of extinguishing the virus this way has quickly faded.
"I think there is broad consensus that the virus will not go away," Amalio Telenti, MD, chief data

scientist of the San Francisco -based Vir Biotechnology Company, says.

Vaccines a High Hurdle to Virus

That doesn't mean that COVID-19 death tolls will continue to climb indefinitely, or even reach the heights of last winter. The virus has not yet developed the ability to completely escape the immune response stimulated by the best of the current vaccines.

"What we've seen with the data is that — at least with the (Pfizer and Moderna) mRNA vaccines — they provide great efficacy against the Delta variant," Ravina Kullar, PharmD, an infectious disease specialist and epidemiologist at UCLA says. But it does mean that humanity is facing a fight that could extend into the foreseeable future.

From the start, epidemiologists talked about "herd immunity," the condition where enough people get vaccinated that a virus can't find enough new hosts to continue replicating. That can happen naturally if enough people become infected, or get vaccinated.

In the beginning of the pandemic, a handful of scientists argued that allowing widespread infection provided the quickest option for containing the virus through natural immunity. That approach was quickly criticized as epidemiologists calculated the millions of deaths that would result.

And there is no guarantee that natural immunity can knock a virus out. Often a virus evolves to evade the immune response, re-infecting more people until it develops new immunity. This results in waves of contagion that ebb and flow over time, as occurs with the flu.

Vaccination offers a slower but much safer approach to crushing a virus. That happened with smallpox, eradicated worldwide in 1980 after decades of global vaccination efforts. In addition, vaccination may be more effective than natural immunity. That appears to be the case with this coronavirus.

It Comes Down to Math

But so far humanity has not been able to eradicate any other viruses through vaccination besides smallpox. The success of such an effort depends on multiple factors, including the effectiveness of the vaccine and other health measures such as — in the case of coronavirus — social distancing and masking.

The race between the evolution of the virus and the vaccination of human beings boils down to a math problem. On average, everyone infected with the original coronavirus that emerged in Wuhan, China, infected 2.5 other people. Epidemiologists calculated that by vaccinating 70% of the population, that could drop to less than one new person infected, causing the virus to dwindle away. People infected with the Delta variant, by contrast, appear to infect more people — estimates range from 3.5 to seven new infections. That raises the bar for herd immunity to as high as 85% of the population.

Vaccination efforts at the moment don't appear likely to achieve that level. In many countries where the vaccines are widely available, the rate of new vaccinations has fallen, putting them behind schedule to reach even the original target of 70%.

At its current rate, the U.S. won't hit that goal until December. But 11% to 14% of Americans say they don't want to be vaccinated if they have a choice. Add that to 10% who want to "wait and see," and herd immunity in the U.S. looks out of reach.

In some low-income countries, the prospect of herd immunity looks even more remote: Only about 1% of their populations have been vaccinated so far.

So why did scientists think herd immunity was ever possible? The first pictures of coronavirus suggested a virus that would only evolve slowly.

Coronaviruses have the ability to proofread their genetic material when they replicate.

This makes mutations less likely than with many other viruses. And the virus was under little evolutionary pressure because it had plenty of fresh victims with no immunity.

But as the virus spreads, encountering more and more people and more and more immune responses, mutations become more likely.

"If you put it in hundreds of millions of people, more variations are going to arrive," John P. Moore, PhD, a professor of microbiology and immunology at Weill Cornell Medicine in New York City, says.

Some scientists think the virus can never change enough to totally escape immunity generated by the vaccine. These vaccines stimulate antibodies that attack parts of the spike the virus uses to latch onto its host's cells. In the most contagious variants, including Delta, the virus has changed parts of its spike, making it less susceptible to the antibodies. The vaccines still stimulate antibodies that attack other parts of the spike, so their effectiveness is still strong. Also, the vaccines stimulate cellular immunity, a process by which immune cells destroy the infected cells before they can release viruses.

There is growing evidence this natural immune process works against the variants, says Pauline Vetter, MD, an infectious disease specialist at Geneva University Hospitals in Switzerland.

Additional doses of vaccine, booster shots with improved formulas and even completely new types of vaccine are all under research.

Is a Finish Line in Sight?

Could the virus run into an evolutionary cul-de-sac? "You can't mutate the spike proteins indefinitely without them losing some function," Moore said. "They're not infinitely plastic. And yet, you could imagine there are some variants that could be worse."

The complex interaction of these factors and others — such as the durability of the immune response — makes forecasting the future of the pandemic difficult.

But most experts think it won't go away. In a survey of 119 immunologists by Nature, 89% said they expect the virus to become endemic, "one that continues to circulate in pockets of the global population."

In that way it could resemble the flu, perhaps waxing and waning with seasons, worse one year, better another year as both virus and the defenses against it evolve.

Parts of the world could approach herd immunity through vaccination. In the U.S., that could mean whole states, or perhaps cities. "We're not going to have a national herd immunity, but we are probably close to herd immunity in significant regions of the country," Moore said. "I live in Manhattan. Life is pretty normal."

In Los Angeles, meanwhile, Kullar warns that the death rate is rising once again, and local health officials are requiring even vaccinated people to wear their masks in public places.

"I think we just need to keep in mind that the pandemic is not over yet," she said.

Study: Pfizer, AstraZeneca Vaccines Effective Against Delta:

The Pfizer & AstraZeneca vaccines, the primary vaccine options in the UK, were less effective against Delta variant of the coronavirus compared with the Alpha variant (known as B.1.1.7), according to a study published online Wednesday in the New England Journal of Medicine.

Researchers, led by Jamie Lopez Bernal, PhD, from Public Health England, write that the lower effectiveness against the Delta variant is particularly evident after a single dose, but even after two doses they were less effective. Still, the Pfizer vaccine was at least 88% effective against Delta after two doses; the AstraZeneca vaccine was 67% effective.

The differences were particularly notable after only one dose of either of the vaccines. With one dose of Pfizer, the effectiveness against the Alpha variant was 48.7% compared with 30.7% against the Delta variant. Results after one dose of the AstraZeneca vaccine were similar.

The Delta variant first emerged in India, but rapidly spread globally and is now fueling an increase in COVID cases in countries including the United Kingdom. In the United States, the Delta variant now accounts for at least 83% of cases.

"The fact [that] there is still notable effectiveness is encouraging. However, complacency is not warranted, since the virus will continue to cause at least mild disease even in some [of] those vaccinated with two doses," Stephen J. W. Evans, an epidemiologist with the London School of Hygiene & Tropical Medicine (in the UK), says.

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COVID19: Weekly Update.

 # The numbers below are from
Saturday 07-24-2021 * 12pm US East coast Time...
Compiled Periodically By:

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There are likely false data & variations in data most of the time, so,
Please use the data wisely.
Details are compiled from various sources.
Marked "*" are not reliable data.

World:
194,252,204. Cases. / 4,164,023. Deaths.

Recovered till today:
176,305,145.

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01. U.S. A.:
35,283, 145. Cases. /626,664. Deaths.

02. India(???)**
31,341 507. Cases. / 420,196. Deaths.

03. Brazil:
19,632,443. Cases. /548,420. Deaths.

07. UK:
5,637,975. Cases. /129,044. Deaths.

25. Canada.
1,672,340.Cases./26,539.Deaths.

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00 (India): Gujarat* :(???)
824,683.(???) Cases. /10,076. (???) Deaths.

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USA States:

01. California:
3,900,115. Cases./ 64,229. Deaths

02. Texas*:
3,071,019. Cases. /53,187. Deaths.

03. Florida:
2,511,084. Cases / 38,714. Deaths.

04. New York:*
2,194,974. Cases / 54,176. Deaths.

05. Illinois:
1,407,929. Cases. / 25,867. Deaths.

06. Pennsylvania:
1,223,513. Cases. / 27,920. Deaths.

07: Georgia:
1,157,705. Cases / 21,614. Deaths.

08. Ohio
1,120,922 Cases / 20,467. Deaths.

09. New Jersey*.:
1,032,255. Cases. / 26,568. Deaths.

15. Massachusetts:
715,180. Cases. / 18,046. Deaths.

31. Connecticut:
352,037. Cases /8,286. Deaths.

COVID19: DOS AND DON'TS.

***More than 4** Covid19 vaccines are available now nationwide in the US. Find out how to get yours.

More serious Delta and Delta Plus (Indian), Lambda verients are around &can create an another pendamic, so be careful & follow religeously the Guidelines given by the Medical Authorities.

***** Finally Vaccine is available all time in the US; India and many parts of world, many of us got both the doses, or single dose in case of Jhonson & Jhonson's vaccine. Yet post vaccination results/effects are not known to the research/medico community fully. We are still in a Pandemic Period, of Phase 2 and 3, also possible invasion of new 4 or more strains of UK, Brazil, South Africa, and now India Coronavirus.

* Entering the new wave of Delta and Delta Plus and three other virus varients, the number of cases are still on a higher side, yet to achive the flat curve, world over most of us are just ignoring the pandemic do's & don'ts, particularly when we are with festivity mode in Summer days of 2021, so please take Extreme Care, Stay Safe & Stay Home. Yet not an easy time for every one!

* Corona is still around, & may remain lifelong! It's not as simple as viral flu. It's as dangerous as like a contest of survival of the fittest.

* Vaccine is available now, first to the frontline medico fraternity, patients in need, & nursing home/long term care facilities residents on a priority, so be careful & protect yourself & your loved ones for good. Mask, frequent hand wash with soap & social distancing only is the option for now

* **Now Mask is not needed in the USA, if you are vaccinated.** But it is advised one must use Mask, even if you have taken Covid shots, Vaccine is just protection, it's not a cure! Also wear Gloves, Sunglasses & the most important: keep safe distance, keep washing your hands frequently with soap or use reliable sanitizer either one at least for 30 seconds.

* In India nasal steam (Naas) is recommended by the Government authorities, Ayurvedic practitioners, & also is a traditional remedy, but the US CDC and other Western Health Authorities doesn't recommend it due to a probable risk to the brain.

* If you can, use Mouth Rinse, twice a day, will help to boost your oral health.

* If you have young kids/minors attending the school or college, it's advised to put on the mask for everyone inside the home.

* We are passing through a tough time of Life & Death. Follow Social Distancing, but stay in for Social Contacts. If you know any one suffering with Corona, your nearer or dearer, call and talk to them frequently, we don't know whether they will return safely with us. Call other relatives/friends, at least ten persons a week. We are social & want to take care of those who are cut off due to Corona self-imposed lockdowns. Also keep busy yourself & family members with plenty of daily activities like yog, exercise & Stay Physically Fit, Pursue Your Hobby, Get Adequate, at least 6 to 8 hrs. Of Sleep, & Eat Healthy Balance Diet.

*** Yet it's a long march to finish, no one knows when we will...!!!!!**

Take care, & Stay Safe.