

COVID-19 IN ENDEMIC ERA

Despite emergence of new variants, the novel coronavirus sees a decline in disease severity, indicating a shift to endemicity

SEEMA PRASAD



ON MAY 5, 2023, the World Health Organization (WHO) formally announced that the novel coronavirus or COVID-19 outbreak was no longer a public health emergency of international concern. WHO's decision—which came after careful deliberations by the global health body and the International Health Regulations Emergency Committee for COVID-19—places the viral disease in the list of other endemic respiratory illnesses. The disease has now been integrated into regular respiratory disease surveillance networks worldwide. In other words, COVID-19 may have entered into an era of endemicity, causing occasional surges and warranting public health surveillance, but with a marked decrease in severity of disease.

COVID-19's evolution into an endemic disease was evidenced throughout 2023. The year saw

its share
causes co
advantag
relative p
cases. Bu
as those
interest-
the virus

Waning

The XBB
in 33 co
XBB.1.16
in bed o
waves,"
April 17

The
also sho
has spr
greatly
JN.1 is
requir
says N
chief of
studies
COVID-

JN.
end of
Decem
increas
accordi
22, 20
Thailan
compa
and XR
countr
geogra
Twitte
Prades
on info

EG
Omicr
report
descen
Data, t
the US
Howev
second
"co
consta
but in
He no
the vir
pande

its share of surge in infections and emergence of new variants of the SARS-CoV-2 virus that causes COVID-19. WHO identified three variants of interest (VOIs, or variants that have a growth advantage over other circulating variants in more than one WHO region, with increasing relative prevalence alongside an increasing number of cases over time) that led to an uptick in cases. But, none of them caused the “waves” seen in the past few years of the pandemic, such as those due to the Omicron (B.1.1.529) or the Delta (B.1.617.2) variants. These variants of interest—XBB.1.16, EG.5 and JN.1—emerged from the sublineages of the Omicron variant of the virus.

Waning severity of disease

The XBB.1.16 variant was identified in January 2023, and by April 2023, WHO noted its presence in 33 countries. However, “no changes in severity have been reported in countries where XBB.1.16 are reported to be circulating. In India and Indonesia, there has been a slight increase in bed occupancy numbers. However, the levels are much lower than seen in previous variant waves,” the global health agency noted in its “XBB.1.16 Initial Risk Assessment” released on April 17, 2023.

The latest variant of interest JN.1, a descendant of the BA.2.86 lineage of Omicron, has also showed a wider spread. Since its likely emergence in Luxembourg in August 2023, JN.1 has spread to 41 countries, including India. But experts note that JN.1 does not appear to greatly threaten public health. “Based on the information we have, JN.1 is like any other Omicron subvariant. It is a mild disease, not requiring hospitalisation, and is not associated with severe disease,” says N K Arora, paediatrician at Fortis Hospital in Delhi and the chief of the SARS-CoV-2 Genomics Consortium (INSACOG), which studies and monitors genome sequencing and virus variation of COVID-19 strains in India.

JN.1 appeared to have led to an increase in cases towards the end of the year—during the 28 days between November 20 and December 17, Southeast Asian countries reported a 388 per cent increase in caseload compared to the previous 28-day period, according to WHO’s COVID-19 epidemiological update on December 22, 2023. Indonesia led the region with 3,275 cases, followed by India (3,241 cases) and Thailand (2,120 cases). India logged an increase by a 520 per cent during this period as compared to the previous 28 days, according to WHO. “The one difference [between JN.1 and XBB.1.16] is despite a fast growth trajectory, the XBB.1.16 remained confined to few countries and states. Whereas JN.1 looks like it causes more widespread infections in different geographical locations simultaneously,” said a post on social media platform X (formerly Twitter) by Vipin M Vashishtha, a paediatrician from Mangala Hospital in Bijnor, Uttar Pradesh, and a member of WHO’s Vaccine Safety Net, a global network of websites working on information related to vaccine safety.

EG.5, another variant of interest reported in India in December. A descendant of the Omicron lineage XBB.1.9.2, EG.5 was first identified in February. By August, it had been reported in 51 countries. As of November 20, 2023, 108,911 sequences of EG.5 and its descendant lineages were been submitted to The Global Initiative on Sharing All Influenza Data, from 93 countries. WHO notes that as a result of EG.5, COVID-19 hospital admissions in the US rose by 40 per cent from June and in England 76 per cent from July 21 to August 4. However, it says that this surge did not compare to the proportion to the cases of the first and second waves of the pandemic.

“COVID-19 is endemic, and will continue to rise with all kinds of mutations. There is a constant struggle between the virus to survive and the population to prevent severe disease, but in the process, the virus also loses its virulence and ferociousness over time,” says Arora. He notes that this is the case in India; with mild disease, the population continues to harbour the virus, hence it survives. It is a natural phenomenon that also occurred after the influenza pandemic in 1918-22, he says.

WHO identified three variants of interest in 2023—XBB.1.16, EG.5 and JN.1—of the SARS-CoV-2 virus that led to an uptick in cases. But, none of them caused the ‘waves’ seen in the past few years of the pandemic

BUMPS IN FIXING PANDEMIC TREATY

Dispute over intellectual property rights, access and benefit-sharing mar progress on global accord

IN MAY 2024, the world is set to get a new agreement to aid the global fight against future pandemics. The "Pandemic prevention, preparedness and response accord", a proposed international agreement, aims to help national, regional and global authorities improve resilience to disease outbreaks. However, despite two years of negotiations to decide the instrument, countries have been unable to reach a consensus on issues of intellectual property rights and access and benefit-sharing.

The need for a pandemic treaty was highlighted in 2021, amid the mammoth loss of life and disruption of normalcy during the COVID-19 pandemic. The World Health Assembly, the decision-making body of the World Health Organization (WHO), held a session in December 2021 to set up an Intergovernmental Negotiating Body (INB) comprising all its member-countries, associate members and regional economic integration organisations to draft this agreement. Through this treaty, WHO aims to ensure a more level playing field in access to the tools needed to prevent pandemics like vaccines, personal protective equipment, information and expertise, and access to healthcare for all people. The treaty is planned to come into force in May 2024, after INB submits its draft at the 77th World Health Assembly.

INB has so far had seven deliberative sessions between February 2022 and December 2023, with a draft accord shared in October 30, 2023 before the seventh meeting. However, there are two contentious issues on equitable vaccine distribution that hinder progress. The first is on intellectual property rights. The October draft mirrors a proposal put forward in 2020 by 100 countries to the World Trade Organization (WTO), to issue a waiver for intellectual property rights on COVID-19 vaccines and antivirals for at least three years. The proposal, led by India and South Africa, was rejected at WTO. The accord draft recognises that the

"protection of intellectual property rights is important for the development of new medical products, and recalled that intellectual property rights do not, and should not, prevent Member States from taking measures to protect public health". It further recognises concerns about the effects of intellectual property rights on prices. "Underscoring the importance of promoting the early, safe, transparent and rapid sharing of samples and genetic sequence data of pathogens with pandemic potential," the draft read.

Article 11 of the draft document also asks members to make use of the flexibilities provided in WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) that allows countries to develop national policies and conditions to support the development and access to pharmaceutical products.

In a written submission to INB on November 10, 2023, during the seventh negotiation session, WTO asked for more clarity on the general term "waivers of intellectual property rights". Further, according to *Swissinfo.ch*, a branch of the Swiss Broadcasting Corporation, developed nations such as the US, Switzerland and the EU member-nations do not favour a relaxation in intellectual property rights.

Article 10 of the accord draft calls on Parties to establish a multilateral system for access and benefit sharing, under the Pathogen Access and Benefit-Sharing System (PABS). It proposes encouraging manufacturers from developed countries to collaborate with manufacturers from developing countries through WHO initiatives to transfer technology and know-how; and tiered pricing or other cost-related arrangements, such as no loss/no profit loss arrangements, for purchase of pandemic-related products.

This provision too, has sparked debates among developed and developing countries, according to media reports. The two points are likely to be negotiated further before the pandemic accord can be finalised.

Public health specialist Chandrakant Lahariya suggests that in India, COVID-19 had already reached the endemic stage in 2022. The slow uptick in the number of cases justifies the disease's endemic status in 2022 and 2023. According to data with WHO, by March 2022, India reported 43,019,453 confirmed coronavirus cases, which increased 5 per cent increase to 45,001,764 by November 30, 2023.

According to Lahariya, to understand if a disease has become endemic, one should consider its socio-economic impact in a short period. As of August 2022, risk of social disruption caused by fear and panic as a consequence of COVID were deemed minimal due to a better understanding of the disease, he says. Moreover, by 2022, some 58.8 per cent of the

population had received two doses of the vaccine, and 70 per cent had received at least one dose, and most restrictions were lifted, indicating endemicity.

Nevertheless, WHO warns countries against letting down their guard. "The risk remains of new variants emerging that cause new surges in cases and deaths. The worst thing any country could do now is to use this news as a reason to let down its guard, to dismantle the systems it has built, or to send the message to its people that COVID-19 is nothing to worry about," WHO Director-General Tedros Adhanom Ghebreyesus said on May 5, 2023, while declaring that COVID-19 is no longer being a public health emergency of concern.

WHO calls for long-term focus

Even as the world identifies newer COVID-19 variants and gauges its endemic status, WHO on September 4, 2023, released a document outlining an emergency response to long-term COVID-19 disease management. The document highlights assessment of immunity in the population as a result of vaccination and/or infection, vaccination coverage among the highest-risk groups, and the capability to respond to any resurgence due to SARS-COV-2 variants.

With COVID-19 related initiatives and policies now transitioning to long-term efforts, the document advises reassessment of systems to share information on surveillance, testing, sequencing, burden metrics and vaccination coverage among stakeholders, along with sustained public health programmes. The global health body had, in April 2020, provided support for setting up of the Access to COVID-19 Tools (ACT) Accelerator partnership, a collaboration of governments, business, civil society and global agencies that helps coordinate the fight against the disease worldwide. ACT-Accelerator was activated in October 2022, to support countries in their transition to long-term COVID-19 control. It had supplied 75 per cent of the vaccines given to low-income countries through COVAX, a worldwide initiative aimed at equitable access to COVID-19 vaccines, directed by GAVI vaccine alliance, the Coalition for Epidemic Preparedness Innovations (CEPI), WHO and UNICEF.

WHO also recommends that countries continue enhanced surveillance and conduct special studies to monitor SARS-COV-2 infection in high-risk groups, characterise new variants and aspects of their severity, transmissibility and immune escape. It calls for studying the impact of countermeasures and better understanding of long COVID, a term used that refers to persisting symptoms long after a person has contracted the infection.

It also suggests that governments around the world integrate surveillance for SARS-COV-2 and influenza, by enhancing the Global Influenza Surveillance and Response Systems, and use other surveillance models to keep a track of known SARS-COV-2 variants and identify new ones. It has recommended using these systems to also better understand the relative co-circulation of respiratory viruses like the influenza virus, respiratory syncytial virus (RSV), Middle East respiratory syndrome coronavirus (MERS-COV) and other viruses and come out with suitable response measures. ■

With COVID-19 related initiatives and policies now transitioning to long-term efforts, WHO advises reassessment of systems to share information on surveillance, testing, sequencing, burden metrics and vaccination coverage