

Should we relax the norms on SARS CoV-2 pandemic yet?: Analysis of the Joint statement on COVID pandemic within India

Abstract

The demographic and genomics of COVID-19 have changed with the advent of new BF.7 and XBB Omicron variants in the population. IPHA and IAPSM have released the 5th Joint statement on COVID-19 pandemic in India, where “Living with COVID” is the main theme. The report has summarized that it was time to declare an end to the pandemic, and institutionalize mechanisms for preventing misuse of any emergent disease. However, we should look towards the trends worldwide and be prepared for incoming new variants with robust surveillance to prevent another pandemic. Genomic sequencing and its association with the disease severity, strengthening the comprehensive primary health services are few of the measures that can be taken. Evidence-based decisions should be followed rather than keeping only restrained allocation of resources in mind. Despite the present endemic status of COVID-19, state level recommendations and mandates of masks, sanitisers or social distancing might apply in case there is rise of cases. With passage of time, protection against reinfection decreased regardless of vaccination before or after infection. However, people who were both infected and vaccinated had higher protection than those who were uninfected, or received a second dose of vaccine after the same time had elapsed. Remaining cautious and encouraging vaccination for the population should be our ongoing strategy for maintaining high level of seropositivity in the population.

Keywords : COVID-19; Pandemic; Vaccination; Resource Allocation; Genomics

Introduction

COVID-19 has been a part of our lives since the last three years. While posted in the Flu Clinic for an extended 2-year period in our institute, we have seen screening methods change from mandatory epidemiological linkage (travel history in past 14 days or in close contact with a confirmed case) to considering anyone with fever, cough, respiratory ailment with dropping oxygen saturation as a probable case of COVID-19. But the preventive behaviour recommendation for the general public till 2022 hadn't changed: mask up, maintain hand hygiene and cough etiquette, and get vaccinated as soon as possible. While the demographic and genomics of the disease have changed with the advent of new BF.7 and XBB Omicron variants, we have been a steady decline in COVID-appropriate behaviour. Instead Test and

Track method has been given more importance now. International passengers are randomly screened, while negative PCR reports are made mandatory for travellers from China, Hong Kong, Japan, South Korea, Singapore and Thailand since 1st January 2023. New evidence of COVID-19 have brought forth new rules every few months to which we all have seamlessly adopted. But complacency towards the persisting risk of COVID-19 can lower the nationwide preparedness and leaves a gap for another pandemic to occur. What the public health authorities recommend can be of paramount importance for maintaining population health and warrants a thorough scientific analysis and critical appraisal for better understanding.

Joint Task Force Statement

IPHA and IAPSM have released a Joint statement on COVID-19 pandemic in India on 6th January 2023, where the proverb “Living with COVID” is the main theme. Back in 2020, a study done in urban slums of Patna showed seroprevalence for specific IgG antibody to be 31.5%.¹ Chennai showed seroprevalence of 18.4% (95% CI 14.8%–22.6%).² Even national level seroprevalence study revealed only 7.1% (6.2–8.2), which ranged highest to lowest from urban to rural areas.³ Since then India has seen increase in SARS CoV-2 antibody circulation which led to 67.6% seropositivity and achieving near-herd immunity due to the combination of natural infection in 2nd and 3rd waves, and robust coverage of vaccination.⁴ The joint task force has thus declared India as endemic for SARS CoV-2. The absence of an appreciable increase in hospitalization and deaths with no instances of clustering are pointing towards circulation of the new variants in India before being detected overseas. Even the detection system by Genomic surveillance has improved appreciably.

The recommendations of the report project the present and future scenario of COVID-19 in India. It is reported that India would not undergo another wave of COVID-19 variant that would result in significant increase in hospitalisation and deaths. Any significant public health impact could happen only due to major mutations in the virus with unforeseen levels of immune-escape properties which is highly unlikely at this stage. The epidemiological correlates such as changes in the demographic and geographical factors, environment and ecology definitely can herald a possible future trend of seasonal fluctuation due to mutated variants, like in the Influenza outbreaks. In that case, we might see replacement of Hospital-based care with scale-up of Hospital-at-Home (HaH) care. Besides COVID, several diseases can be suitably managed with basic primary and secondary care at home, where patients will have the advantage of quality experience with lower incurred costs and readmission rate.⁵

There is also emphasis on strengthening surveillance including identifying outbreaks and clustering, and genomic sequencing using Integrated Health Information Platform and National Pandemic Preparedness Plan. Over the year 2021-22, the primary variant Delta changed quite rapidly to Omega variant, as the latter spread over three times faster than the former. It showed a sharp decline in Delta and concurrent equally sharp rise of Omicron. A population-based genomic study conducted in Rajasthan from November 2021 to January 2022 included Next-Generation Sequencing of nasopharyngeal or throat swab specimens from SARS-CoV-2 positive patients. The second Delta pandemic wave in India caused an increase in the number of hospitalizations, high mortality rates, high requirement for oxygen, cases of Mucormycosis and post-COVID sequelae too. But the Omicron variants of B.1.1.529, BA.2 and BA.1 lineages emerged with much less severe cases and deaths. There were differences in mutated nucleotide positions to account for the differences between variants causing mild disease, and severe morbidity and mortality.⁶ Continuous genomic sequencing and profiling can predict the disease severity of a present or imminent variant circulating within the community, and help in increasing preparedness of the healthcare delivery system according to the scientific prediction models.

Now there is minimal requirement of universal screening or quarantine of international travellers and contact tracing, hence screening of incoming international passengers should be to identify any emerging variants over detecting and tracking individual cases. One Health has been mentioned with need to constitute and strengthen interdisciplinary teams under the leadership of public health specialists to prepare the governments at all levels. An integrated surveillance team should monitor the trends of COVID-19 disease in both humans and animals, and facilitate the detection of new infectious agents sharing similar genotypes. Determining the spatio-temporal spread of the disease too will guide public and animal health officials in their response.⁷ This includes strengthening the Primary health care systems, especially the National Programme for Prevention of Cancer, Diabetes, Cardiovascular Disease and Stroke, or NPCDCS. There can be effective prevention and control of cardiovascular diseases, which can only happen through a strong PHC system which will include the accessible affordable health services and a series of public health interventions.⁸ Mortality was found to be significantly higher in persons with uncontrolled comorbidities. Now the current pandemic is a fundamental game-changer for prioritization and resource allocation for these chronic illnesses, however NCDs are predicted to remain a major cause of death, and the costliest barrier to the society. NCDs are usually integrated with PHC network

on a feasible platform for monitoring and surveillance, particularly in the LMICs.⁹ So budget-wise also, we cannot separate chronic disease management from COVID-19, and need comprehensive primary health approach towards all the emerging diseases.

Our viewpoint

The report has summarized that it was time to declare an end to the pandemic, institutionalize mechanisms for preventing misuse of any emergent disease by pharmaceutical and vaccine industry, and reassure the population for better preventive methods in the future. There are two recommendations made in the joint task force statement though, that raise certain questions. First one is quite contrary to the measures that have protected people the most these last 3 years. The population-wide use of masks, sanitisers or social distancing at the current level of endemicity has not been deemed mandatory. Due to the recent outbreaks overseas, AIIMS and other hospitals in Delhi, along with IMA issued an advisory to reinforce the COVID-appropriate behaviour for health professionals, patients and attendants alike. This January, the Union government, union territories and states like Karnataka and Uttar Pradesh have emphasised on this behaviour along with higher testing rates and genome sequencing to prevent any potential surge.¹⁰ Despite the endemic status of COVID-19, state level recommendations and mandates might apply in case there is rise of cases detected. There has been a rise of COVID cases of more than 3000 detected in India during the period of March – April 2023.¹¹ Again, the joint report says that 30-35 days after it hits East Asia, the new wave of Covid-19 arrives in India. The current situation could be a similar reflection. To declare any current and future mandate as unnecessary might be too optimistic response to the current decline in active cases of India.

Secondly, the report has recommended vaccination only for those having comorbidities or who never contracted COVID-19. The joint task force is of the opinion that people who had experienced natural infection would not benefit from two primary doses or any additional doses of COVID-19 vaccine, and a documental proof of past natural infection should be considered as adequate alternative. However long-term studies have found that this immunity wanes over time, making breakthrough infections very common. With passage of time, protection against reinfection decreased regardless of vaccination before or after infection. However, people who were both infected and vaccinated had higher protection than those who were uninfected, or received a second dose of vaccine after the same time had elapsed.¹² While incidence natural infection proved more efficient against re-infection than mRNA

vaccines as in a retrospective study done in Qatar, the adjusted Hazard Ratio decreased every month following infection or first-dose vaccination. It was 0.68 (0.51–0.90) after four months, but decreased gradually to 0.32 (0.27–0.38) after eight months. This decrease may be attributed to the advent of omicron wave, thus vaccination still remained the most reliable tool against COVID-related hospitalisation and death.¹³ Only one-tenth of the vaccinated individuals experienced breakthrough infections, with very few serious cases and no death.¹⁴

Conclusion :

We should look towards the trends worldwide and be prepared for incoming new variants with robust surveillance and genomic detection system. Any wildly different variant could overcome our immune protection and create a fourth wave, by which time it would be quite late to protect the vulnerable. Letting our guard down could be a regrettable mistake. We should encourage the public to keep following the measures which will protect them from all kinds of infection, not only SARS CoV-2. Since majority of the infected have been asymptomatic and have no proof of being infected, remaining cautious and encouraging vaccination for the population should be our ongoing strategy for maintaining high level of seropositivity. The antibodies have shown to be waning over time, which is why breakthrough infections occur more in the unvaccinated. Having both natural and vaccine-induced immunity confer a higher level of protection than either one over time. The indigenous vaccines have given great results in protecting the infected against severe infection and mortality, thanks to the indomitable scientists working round-the-clock to refine ways to keep us safe. Evidence-based decisions should be followed rather than keeping only restrained allocation of resources in mind. India should not sacrifice the health of its 1.3 billion population in the hope that COVID-19 or any emergent pandemic would not come knocking on its doors again. Sound preparation strategies should be the only motto and motivation for strengthening the public health capacity of the country.

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