The cusp

India must press ahead with vaccination to avoid repeat of troubles of the second wave

ugust has begun on a disconcerting note in India's coronavirus story. The seven-day weekly av-Lerage of cases hovers around the psychologically important 40,000 mark and there is an uptick in daily new cases with the latest numbers a little over 41,000. A major concern that has assumed national proportions is the trajectory of cases in Kerala. With nearly 20,000 fresh cases being added every day, it is of concern that if a State with an admirable track record during the earlier wave is under siege now, then many other States could be particularly vulnerable against new variants at the start of a third wave. In Kerala, the rise in cases is concomitant with a rise in testing that has increased from 130,000 a day on July 25 to 162,000 as of Monday, indicating that the infection may be rapidly spreading. Nearly 11 States are now showing a weekly increase in cases. Kerala is not the only point of concern. The national situation has prompted the Health Secretary to write to States that all districts reporting a positivity rate of more than 10% in the last few weeks ought to consider strict restrictions to curtail the movement of people and formation of crowds to prevent the spread of infection. Apart from Kerala these include Maharashtra, Karnataka, Tamil Nadu, Odisha, Assam, Mizoram, Meghalaya, Andhra Pradesh and Manipur. The Indian Council of Medical Research (ICMR) has also expressed concern that 46 districts are showing more than 10% positivity while another 53 districts are showing a positivity between 5%-10%. India's positivity rate is around 5%, that could well descend into a runaway climb in serious infections if unchecked.

The ICMR's flag-waving comes in the context of the agency's Fourth National Serology Survey finding that nearly 40 crore Indians likely lacked antibodies to the virus and were particularly vulnerable. On its own, the rise in infections would have been less of a concern had a substantial number of Indians - particularly those over 45 – been double vaccinated. As in previous waves, the elderly continue to be the most vulnerable. Nearly 80% of the mortality was from these vulnerable age groups and only 11% of the eligible adults have been fully vaccinated, which means significant numbers of the population are yet to get sufficient protection. India has so far administered 47.1 crore doses since the beginning of the vaccination drive in January. The Centre has said it will vaccinate all adults, 94.4 crore approximately, by the year-end. This target requires a daily inoculation of 90 lakh to 100 lakh doses per day. For most of July, the average inoculations have ranged from 30-60 lakh. States whose districts are most vulnerable ought to be given preference and there should be accelerated campaigns to double inoculate the elderly. Every effort should be made to break the link between infections and hospitalisation and deaths.

Being Bommai

The new Chief Minister will have to strike a balance between conflicting interests

The new Chief Minister of Karnataka, Basavaraj Bommai, has to reconcile several conflicting factors while appointing his Council of Ministers. His predecessor B.S. Yediyurappa was ejected by the Bharatiya Janata Party high command that wants a new start in the State. The new Chief Minister is seen as aligned to Mr. Yediyurappa and both belong to the Lingayat community that is strong, numerically and economically. Mr. Yediyurappa's heyday might be behind him, but he continues to hold significant sway among voters. Given the circumstance, the challenge before Mr. Bommai is to strike a balance between the imperatives of change and continuity. Mr. Yediyurappa had little moral scruples in pursuing political power and the Bharatiya Janata Party rode on his shoulders until recently. But the baggage that came with it has been heavy. He masterminded large-scale defections from the Congress and the Janata Dal (S) to aggregate an Assembly majority for the Bharatiya Janata Party that it had not won in the election. Allegations of nepotism and corruption shadowed his tenure. The steadfast support that he enjoyed among the Lingayats, who remain the backbone of the Bharatiya Janata Party's social base in Karnataka, was intimidating for the party central leadership. And when it finally managed to effect a change, it ensured that the baton was handed over to his nominee and not to any of his many detractors in the party.

Mr. Bommai has to demonstrate to the Lingayats that he is one among them while trying to reach out to other communities and expand the party's base. He has to balance various interest groups within the Lingayats. He has to shake off the debris of the past without earning the wrath of Mr. Yediyurappa. He has to demonstrate a capacity to govern better than his predecessor but keep various factions and interest groups that held sway during the previous regime happy. He has to deliver on the priorities of the Bharatiya Janata Party high command on the one hand and also balance his known personal convictions with the requirements of Hindutva politics into which he converted as late as 2008, at the age of 48. Even after taking over as Chief Minister, Mr. Bommai spoke about his father and former Chief Minister S.R. Bommai's "principled politics" that he said was inspired by Left leader M.N. Roy. Mr. Yediyurappa has said it is the Chief Minister's prerogative to choose his Council, but also expressed confidence that the defectors will be protected. All this at a time when it remains unclear whether the Bharatiya Janata Party's plans for him are for the longer term. Having come this far without alienating any section within the party or his support base, it is likely that Mr. Bommai will pass the test.

Fathoming serosurvey data, with caution

The data from the ICMR's Fourth National Seroprevalence Survey have clear implications for the situation in India today



GAGANDEEP KANG

The past two weeks have seen the release of the Fourth National Seroprevalence Sur-COVID-19 (https:// bit.ly/3lklMzJ), as well as the reporting of data of serosurveys independently conducted by State governments such as in Tamil Nadu. The data from the Indian Council of Medical Research (ICMR) conducted national serosurvey are truly remarkable, indicating that between December-January, when the third serosurvey was conducted, and June-July 2021, at least 40% of the population of India, over 500 million people, were exposed to the novel coronavirus of which a small proportion have antibodies because they were vaccinated. The data also show for the first time that over half of all children tested have already been infected, which is expected and reassuring.

Not from infection alone

Such a high rate of infection seems incredible, and if true, needs to serve as a warning to India and the world because it shows the consequences of a combination of variants, inappropriate population behaviour and delayed implementation of public health measures. It is, of course, evident, that all of the seropositivity did not come from infection alone, but given that the seropositivity rate was 67% and the serosurvey reports that a quarter of eligible adults were vaccinated, a large proportion of the antibodies resulted from detected and undetected infections in the first or second waves, with the sharp seropositivity rise indicating that the bulk must have occurred during the second wave. With less than 32 million positive cases, of which many may be positive more than once,

and the likelihood of waning antibodies leading to some of those previously infected testing negative subsequently, the seropositivitv of 67% is an under-estimate. There are other caveats as well.

Although the serosurvey methodology is similar to previous rounds and sampled individuals in 70 districts in 21 States, it is not clear how representative the survey really is – given the reported two-dose vaccine coverage of 13% in adults which is much higher than the national coverage at the time, and the known high heterogeneity between and within States. This is where State-level data can be useful, and the third Tamil Nadu serosurvey, conducted in over 26,000 participants and compared to previous rounds allows comparison of at least district-level information.

Data from the States

The National Serosurvey data indicated that Madhya Pradesh, Bihar, Rajasthan and Gujarat have over 75% seropositivity, while only Maharashtra, Assam and Kerala were below 60%, with Kerala the lowest, at 44.4%. Although heterogeneity across districts is likely, the fact that the national serosurvevs were repeated in the same districts allows for some comparison of seropositivity rates over time. For example, in Kerala, when the national rates were approximately 0.7%, 7% and 24%, the corresponding rates were 0.3%, 0.9% and 11.6% during the first three rounds of serosurveys, showing a consistently lower exposure than the national average, but a large increase between the

third and fourth serosurveys. If we examine the data from Tamil Nadu, where the State-led serosurveys were done in October 2020, April and July 2021, some figures jump out. There appeared to be no change from October to April at the State level, with 31% and 29% positivity, but then there was a massive increase to 66%. Comparing the ICMR survey in three districts with the 38 district surveys of the Tamil Nadu Directo-

rate of Public Health, shows that the ICMR serosurveys found a seropositivity of 43%, 24% and 31% in the districts of Chennai, Coimbatore and Thiruvannamalai in the serosurvey in December 2020-January 2021. The corresponding figures from the State serosurvey were 41%, 22% and 36% in October 2020, 49%, 20% and 34% in April 2021, which rose to 82%, 43% and 68% in July 2021. Some districts showed marked variability, with the central and southern districts showing significant declines in antibodies between October 2020 and April 2021 followed by a large increase in July 2021. For example, Madurai went from 40% to 19% to 79% and Thoothukudi from 39% to 21% to 72%.

Explaining variation What explains these variations and how can these data be used at the national-State levels? First, there was inconsistency in the assays used for antibody estimation, with the ICMR using an ELISA test that measured antibodies to inactivated virus in its first round and then switching to a method that measured antibodies to nucleocapsid and spike proteins. Tamil Nadu used a chemiluminescence method for all its assays, while serosurveys in Delhi, Mumbai, Pune and other local serosurveys have used different methods - which means that some of the variations may be due to the testing methods which have varying sensitivity and specificity for antibodies directed against different viral antigens. Second, the sampling methods across serosurveys have differed with the ICMR using a cross-sectional survey in 70 districts that

were decided/based on reported cases with some lack of clarity on how villages/wards were chosen, while others have used population proportional to size, directed and convenience sampling. Third, the age groups have varied across surveys and with time and not all serosurveys have reported age-stratified results. Fourth, antibodies decay with time, as illustrated in the data from Tamil Nadu's first and second serosurveys

So, analyses need to account for the underestimation of exposure. There are many other considerations for analysis, such as the proportion of people included who have reported previous SARS-CoV-2 infection or exposure or the proportion vaccinated. But in general, serosurveys more accurately reflect the experience of the population with an infectious agent than reported cases. This is especially true in India, where without targeted effort and sometimes despite detailed search, it is not possible to discern the reasons for testing, the numbers of individuals that have contributed to cumulative testing, the locations where tests were done or the types of tests used – all of which are essential to understanding the strengths and limitations of the data on reported cases, and the test positivi-

Reported cases represent the tip of the iceberg for a virus that can cause asymptomatic infection or result in mild symptoms that are not distinguishable from other respiratory viral infections. Serological data has value for public health because knowing where and how many have already been exposed to the virus gives a clearer picture of how and when infection has penetrated the population. The data from the ICMR's Fourth National Seroprevalence Survey therefore, have clear implications for the situation in India today.

The Kerala example

When Kerala is reporting the bulk of the country's positive cases and has a reproductive rate of infection of greater than 1, how concerned should we be? Seroepidemiology shows that the State has over 18 months been able to limit the exposure of its population, and vaccination data indicates that the State is outperforming most others. In general, the health-care infrastructure has not been overwhelmed, deaths are low, and shortages of oxygen and hospital beds have not been reported. Relaxation of restrictions over Eid on July 21 are likely to have resulted in cases which should peak in the first week of August, but there is a need to ensure continued population compliance with restrictions, particularly with Onam approaching and a need to ramp up vaccination. In fact, given Kerala's success in controlling the virus so far, a key consideration should be whether States and districts with the lowest seroprevalence should receive a greater proportion of the vaccines while supplies are limited.

The immunity gap identified in Kerala demonstrates the value of serosurveillance and the need to ensure that we continue to use this very valuable tool not just to record the history of viral circulation in India but also to inform decisions going forward. At the State and district levels, what can be changed based on serosurvey data? Increasing vaccination in areas with the lowest exposure in parallel with ensuring high testing levels and health-care system preparedness in areas with high vulnerability are immediate responses. However, serosurveys need to

be continued and the data integrated with testing, vaccination and clinical data. These are needed to understand ongoing infection rates, age distribution of infections and cases. variations could be driven by seasonal coronavirus exposure, vaccination and the effect of waning antibodies, all of which will be essential to inform policies on the need and use of booster doses and long-term system preparedness.

Gagandeep Kang is Professor, Christian

A disconcerting picture behind the headline numbers

There is evidence to suggest that the PLFS data may underestimate the loss of earnings and fall in consumption



The third annual round of the Periodic Labour Force Survev (PLFS) data conducted during July 2019-June 2020 was rerecently (https:// bit.ly/3flSDAx). The PLFS captures key indicators of the labour market such as the labour force participation rate (LFPR) – the proportion of population working or seeking work; worker-population ratio (WPR) – the proportion of population that is working; and the unemployment rate (UR) – the proportion of population in the labour force that is seeking but unable to find work. It also provides data on the earnings of different segments of workers.

The PLFS 2019-20 was expected to provide official estimates of the labour market distress that followed dwindling GDP growth and a lockdown following the novel coronavirus pandemic that brought several economic activities to a standstill. The data, however, show a decline in the unemployment rate to 4.8% in 2019-20 – the lowest in three years. While the headline numbers may seem pleasing, a detailed analysis paints a rather disconcerting picture.

Falling unemployment rate The LFPR, WPR and UR are measured using two approaches - usual status and current weekly status. The usual status considers the activity of an individual over a relatively long period during the last 365 days, whereas the current weekly status is based on activity performed during the reference period of the last seven days.

The unemployment rate, as measured by the usual status, fell from 6.1% in 2017-18 to 4.8% in 2019-20. This is because even as the LFPR increased from 36.9% to 40.1%, the WPR increased from 34.7% to 38.2% during the same period. In other words, while there was an increase in the share of the population in the labour force over the last three years, there was an even higher increase in the share of those who were able to find work, and hence unemployment fell.

A fall in the unemployment rate would be heartening, except, it seems puzzling as it comes at a time of unprecedented economic distress. The quarterly GDP growth declined for successive quarters, sliding from 8.2% in January-March 2018 to 3.1% in January-March 2020, after which the economy contracted by 23.9% during April-June 2020.

Workforce composition

How were more people able to find jobs when economic activities were slowing down? The answer lies in the changing composition of the workforce.

The PLFS categorises the workforce into self-employed (which includes own account workers, employers and unpaid helpers in family enterprises); regular wage/



salaried workers and casual labourers. Own account workers run small enterprises without hiring any labour but may take help from family members, while employers hire workers. Of all the worker categories, only the proportion of unpaid family workers has gone up significantly in the last three years. In fact, between 2018 and 2019, while the workforce increased by 2.9%, the proportion of all other employment categories in the workforce declined, except unpaid family helpers

Over the same period, almost the entire rise in the workforce was accommodated by agriculture. Agriculture continues to perform the function of a sink - absorbing the workforce that cannot find remunerative employment elsewhere.

There is also a gendered dimension to the changing composition of the workforce. The category of unpaid family workers is dominated by women. The story of the declining unemployment rate can largely be explained by a movement of women from primarily being engaged in domestic work to agriculture and other petty production activities as unpaid family helpers, possibly in the hope of increasing family income in the times of unprecedented distress and lack of alternative employment opportunities.

The usual status is based on a derestimates open unemployment. This is where the alternative measure of unemployment is relevant. Using the current weekly status approach, the unemployment rate was estimated to be 8.8%, unchanged during the last three

Impact of the lockdown

The PLFS survey for April-June 2020 overlapped with the national lockdown. The current weekly status unemployment rate in this quarter was 14%, and the urban unemployment rate was around 20%. Corrected for inflation, the average monthly income for the salaried increased by 2% in April-June 2020 over April-June 2019. The monthly earnings of the selfemployed declined by 16% and the daily wage for casual workers declined by 5.6% over the same period. The real monthly per capita consumer expenditure declined

The rise in the average income of salaried workers and the muted impact on consumer expenditure, as estimated from the PLFS, do not concur with other data for the lockdown period. Private final consumption expenditure declined by 26.7% in April-June 2020 over the same quarter in 2019. Numerous small-scale surveys also reported massive earnings loss during the lockdown. There is overwhelming evidence to suggest

that the PLFS data may underestimate the loss of earnings and fall in consumption during the lockdown. This is a missed opportunity for the official survey to capture loose definition of work that uning the lockdown.

Strengthen statistical system

There is no official data on poverty after 2011-12 or on farm income after 2013, and no recent data on migrant workers. While the consumer expenditure data for 2017-18 was buried, the data on situation assessment of agricultural households are not yet released, despite being conducted between January-December 2019, before the lat-

est PLFS. Minor tweaks in future PLFS surveys can fill the data gaps. Currently, the PLFS captures incomes from agriculture and monthly consumer expenditure, but the questions on these aspects lack credibility. The predecessor to the PLFS, the National Sample Survey employment and unemployment surveys, collected data on consumer expenditure using a detailed schedule. There is no reason why the PLFS cannot do the same. Adding questions on costs and returns from cultivation and related activities can also capture more accurate data on agricultural incomes. Lengthening the questionnaire has its costs – but the costs of the absence of reliable and timely data on important policy-relevant indicators are far higher.

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$LETTERS\ TO\ THE\ EDITOR\quad \textit{Letters emailed to letters@thehindu.co.in must carry the full postal address and the full name or the name with initials.}$

The bigger picture

The Assam-Mizoram issue may be moving toward a resolution, but it poses an important question. Are State governments forgetting what the idea of the Union of India is? One can draw up a list of issues between various States which harm the idea of India – i.e., one where you do not discriminate. Let us not forget the difficulty with which this great nation was created and then united. RATNARAJ JAIN,

Legislature and history In the article, "TN

Legislature turns 100" (Tamil Nadu, August 1) and the reference to the two Government Orders (G.O.), famously called 'Communal G.O.s' issued in September 1921 and August 1922, I wish to add that the resolution to pass the Communal G.O. was piloted by the (late) O. Thanikachalam Chettiar (my maternal grandfather), Justice Party Leader and Member of the Legislative Council. The speech he made while introducing the

resolution finds a place in The Penguin Book of Modern Indian Speeches by Rakesh Batabyal with the title, "Proportion of Non-Brahmins in the Public Services".

G.V. BALASUBRAMANIAN,

What ails Indian sports India's medal hunt at Tokyo

has been powered by the women athletes. One cannot resist lamenting that while there is no dearth of talent in sports in India, the gold medal is still elusive.

Given the excellent form she is in, one sincerely hoped that P.V. Sindhu would get India a gold, but, alas, she seemed to lack the killer instinct in her matches. The Central and State governments must provide our sporting talent with world class training and supervised by proper coaches.

THARCIUS S. FERNANDO,

■ The results do indicate how much we lag behind when compared to other nations.

Our sporting system needs to be blamed for this. We hardly give importance to any of the sports barring cricket. The development of more infrastructure, scientific training methods, international exposure, more funding and minimising political influence are needed. Unless any sport is

developed from the grass-root level, India will continue to be at the bottom of the medals table. V. GANAPATHY SUBRAMANIAN, Nagercoil, Tamil Nadu

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■ We need to ponder over our continuing medal drought. We have to set right our priorities right from the school level. The culture of encouraging sports is present only in a minuscule percentage of schools across India. Students across the country should be able to participate in a variety of sporting events so that talent can be spotted and nurtured from a very early age. BRIJ B. GOYAL,

Ludhiana, Punjab