### COVER STORY

# 'Disdainful neglect of public sector must end'

Interview with Professor K. Srinath Reddy, president, Public Health Foundation of India, and member of the ICMR's high-level technical committee on COVID-19. BY T.K. RAJALAKSHMI

WITH ITS POOR PUBLIC health system, India ranks amongst the lowest in the world in terms of testing rates per million population for COVID-19. The lockdown from March 25, extended on April 14 up to May 3 and subsequently to May 17 with a partial opening up, gave the government time to work out a strategy and also reduced the burden on hospitalisations. While the spread of the virus may have been contained to an extent, there is little certainty on whether it has been suppressed.

Professor Srinath Reddy, who is a member of the 21-member high-level technical committee of public health experts, chaired by NITI Aayog

member Dr V.K. Paul, spoke to *Frontline* about the limitations of testing in the general population, the importance of random sampling, surveillance of influenza-like illness (ILI) and severe acute respiratory infection (SARI), and the impact of physical distancing on the poor. Excerpts:

The experiences of dealing with the outbreak are varied across countries, particularly with regard to the extent of lockdown measures, scale of testing and the relative weightage given to these two. The government's current strategy is to expand testing, which is also what the WHO recommends. Have we, however, lost precious time by not scaling up testing during the 30 days of the lockdown? Given the limitations of both an extended lockdown and of testing a 1.3 billion population, what options does India have going forward?

Testing is an instrument that is intended to identify an infected person who is still harbouring the virus and is potentially capable of infecting others. The action that follows is isolation at home or hospital, depending on the



clinical severity of infection. For COVID-19 virus, the test is not a guide to any specific therapy that targets the virus, as no evidence-backed therapy is as yet available. If the intent is to prevent viral transmission by isolating the infected person and his or her contacts, a full lockdown serves that purpose even without extensive testing. If effective, it separates both symptomatic and asymptomatic infected persons from others for three weeks of full lockdown and 19 days of partial lockdown.

Extensive testing of asymptomatic persons in the general population would not have been possible,

given our large and diverse population. There were also limitations in terms of the number of testing kits for this new virus and of personal protection equipment for health care personnel conducting sample collection and analyses. The lockdown served the purpose of isolation, while giving the health system [time] to build up its resources.

It is also incorrect to think that testing should invariably drive the response strategy. Vietnam, which is a relatively unpublicised leader among Asian countries in achieving admirable control, decided not to adopt the strategy of mass testing, but combined strategic testing with other public health measures. Though South Korea has been widely cited as an example of testing-led control, globally there has been no strong correlation between testing rates and death rates. Just compare the widely divergent experiences of Belgium and Bolivia, with the same population size. While Bolivia tested at 2.5 per cent, the rate of Belgium, the European nation had 6,917 deaths compared with the South American nation's 44 when checked on April 25. So, context matters.



**SAMPLES** being collected from a person in New Delhi on May 4.

Testing can be ramped up as lockdown ends in India, to perform district-wise profiling for guiding a differentiated approach to staged release from lockdown. Even as we do that, we must recognise that different tests come with varying levels of false positive and false negative results. False positive tests get amplified in mass testing. So, we also need to support our assessments of spread and control through symptom-based syndromic surveillance of influenza like illness [ILI] in the community and numbers of persons hospitalised with severe acute respiratory infection [SARI]. Together with random sample population testing, these will provide a three-dimensional profile of each district.

Symptomatic cases, as you have pointed out in recent articles, are the tip of the iceberg. The proportion of asymptomatic cases is far more. Should then one concentrate on identifying and treating symptomatic cases or is it important to identify asymptomatic cases too?

It will be difficult to identify all or even most of the asymptomatic persons who are still carrying the virus or were infected recently and eliminated the virus from their bodies. Antibody tests also have false positives and false negatives, with the false positives getting amplified in mass testing. The WHO is now casting doubts on whether antibody presence indicates adequate or durable immunity, and immunologists say these tests only measure humoral immunity while missing out on cellular immunity. Social distancing and personal protection measures will continue to be the mainstay of protection against both symptomatic and asymptomatic virus spreaders. Those who are symptomatic need to be treated according to the severity of their illness. Asymptomatic contacts who test viral antigen positive must be isolated. Others, who are unknown, are best guarded against through social distancing. It is like driving on Indian roads where we don't know which car or truck ahead will suddenly swerve into our lane. It is best to keep a distance.

That said, social distancing is a challenge for the poor. We have to ensure better housing—even if temporary to begin with—and better public transport for them. Let the government take over vacant buildings and press more vehicles into the public transport system.

#### As antibody tests are confined to a certain limited sample, would the evidence indicate that there is no community transmission outside the cohort that is being tested?

It would be a concern if a number of persons, even in the random sample, test positive without travel or contact history. I believe that community transmission is a label we should not be fighting over, but [we have to] plan our strategy to guard everyone. Social distancing and personal protection measures are needed for everyone at the individual level.

However, the three-dimensional picture I referred to earlier will help to decide to what extent economic and

23

social activities can be undertaken at the community level.

#### The importance of contact tracing was seen in the context of Kerala where the number of recovered cases is more than the number of positive cases. New York State, which is the worst affected in the United States, is mulling over a strategy for contact tracing. Do you think this is a viable and effective strategy to pursue once the infection has spread to the extent it has by now?

Contact tracing is an essential component of outbreak investigation and epidemic control. Kerala has done it with remarkable efficiency. Even in New York, there will be pockets where containment strategy will still be needed to stall fresh infections. Community volunteers are a useful ally to the health system for contact tracing. New York must adopt community-based public health strategies which have been tested and found effective in Asian countries, even as it is battling to save lives in hospitals.

#### From 500 odd cases at the beginning of the lockdown, we have now a month later 23,000 plus cases. The base on which the infection can spread is larger now. What would have changed in the 40 days of lockdown that allows us to believe that the situation will remain under control even after May 3?

Given the long incubation period of the virus, some of the pre-lockdown exposures would have emerged as cases during the lockdown. Also, the lockdown has had slippages in some areas. The curve was still on the rise when the lockdown began. It will take some time to flatten. The fact the curve has moved to a lower slope is a reason to hope that the virus is now spreading more slowly.

We need to ensure that social distancing and personal protection measures continue even after the lockdown ends. We cannot assume victory and let down our guard, lest the virus lands a knockout punch. However, we have done well on points in these earlier rounds. Also, we should not judge the country as a single, homogenous entity. There are many areas which have been protected until now and need continued protection. There are some States which are following Kerala's track to control. Others, which are hotspots, need more stringent containment measures to continue. India's diversity needs to be recognised through State-specific or even district-specific assessments.

Considering the counterfactual of where we might have been without control measures, we are better positioned today. That should give us confidence for the future. Also, at each stage we must remind ourselves that our goal is to reduce the numbers of serious cases and deaths. If many of the cases are mildly symptomatic or asymptomatic, should we be perturbed at the number of diagnosed cases?

The doubling time has increased undoubtedly but has not reached a level where the number of active cases is coming down. Have we only slowed down the growth for

## some time or have we also substantially reduced the number of people likely to be eventually infected?

We still have to see what happens when the lockdown is lifted. However, stretching the time for the viral spread gives the health system an opportunity to respond better without being overwhelmed by a surge in serious cases. If we implement our public health measures even more strongly after the lockdown is lifted, we can hope to reduce the total number of cases and deaths. Those who see a bleak future ahead in today's numbers must consider the counterfactual of what might have been without a slowdown and gain confidence to meet a surge should it still happen. Even slowing down the epidemic growth curve gives us the opportunity to build on that advantage, like a first innings lead in a test match.

#### If the lockdown is lifted this month, would it be possible to detect SARI/ILI cases and treat them with the available network of health professionals, private and public?

So far, the public sector has emerged as the hero in our battle, both in the public health response and in providing clinical care. Mobilising all our public sector resources and drawing in private sector resources as needed, we should attempt to provide the best possible responses. Most COVID-19 cases do not require hospital or intensive care. SARI cases will need hospitalisation, as may some ILI cases. It remains to be seen if our health care facilities at all three levels of care will meet the challenge or be overwhelmed. Trends so far suggest that we can meet the challenge.

#### Health systems the world over have been put to test. There is also an increasing realisation that the private medical sector cannot be a substitute for a robust public healthcare system and that the lockdown should be a period to assess those deficiencies. What do you think should be the strategy and road map ahead for a country like ours?

Policymakers and the media should recognise that the most dependable asset in a public health emergency is the public sector. This has also been the experience of other countries. It is also true that the visibility of the private sector in the media, with focus on intensive care and ventilators, has obscured the vital importance of primary health services and secondary care services at district hospitals. If we have to provide effective and equitable health services, whether it is communitypartnered public health or appropriate and affordable health care, the health system must be restructured with a strong public sector at its heart. Whether it is a prompt and potent pandemic response or delivery of universal health coverage, the disdainful neglect of the public sector must end.

In a mixed health system, the private sector can and should play a supportive role to a revitalised public sector, but there should be no mistake as to who is playing the lead. The COVID-19 pandemic has delivered that message in a dramatic fashion.  $\Box$