Evidence, Decision-Making and Policy for COVID-19 in India

MEETING REPORT

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The COVID-19 pandemic has reinforced a need to enhance investments in India's public healthcare systems, improve data collection as well as focus on evidence-based policy formulation and implementation. This was the message of a recently concluded virtual symposium on public health. The symposium, held in November 2020, was jointly organized by Ashoka University (AU) and the George Institute for Global Health (TGIGH) and is the first of a planned series of symposia on public health and policy.

Attended by more than 160 participants globally, the two-hour-long symposium engaged researchers, clinicians and policymakers in discussions of lessons learned from the ongoing pandemic. Eminent policy experts and academics were invited to discuss the role of research evidence in public health and the use of such evidence in driving policy.

Prof. L.S.Shashidhara, Professor and Dean of Research at AU gave the Welcome Address. He stressed the need for health metrics to enable the formulation of policies on healthcare, commenting that a comprehensive set of such metrics were largely absent for India. Reinforcing the need for policy formulation rooted in evidence, *Dr. Shahid Jameel*, Director of the Trivedi School of Biosciences at AU, commented on the need to incorporate the reduced sensitivity of antigen testing *vis-à-vis* PCR tests in understanding the variations in reported cases across different states, as an example of how the form and quality of data needed to be factored into policy decisions based on them.

Dr. Tarun Bhatnagar from the Indian Council of Medical Research (ICMR), National Institute of Epidemiology (Chennai), presented findings from two national serosurveys studying the prevalence of SARS-CoV-2 infection in India. In round one of the national serosurvey, ICMR estimated that there were 64.6 lakh adult infections in the country. They found that the

seroprevalence was low in almost all areas, attributing this to the early phase of infection spread in India. The team also found out that there was a high infection to case ratio as well as a low infection fatality ratio which was probably an underestimate as death reporting was not complete. However, a subsequent second national serosurvey showed that there were nearly 74.3 million people infected with the coronavirus. There was no specific skew in age, sex or occupation in seroprevalence among 15,613 households surveyed.

Dr. Brian Wahl, a faculty member at the Department of International Health, John Hopkins Bloomberg School of Public Health, United States of America (USA), shared lessons and findings of a study of COVID-19 epidemiology and transmission dynamics in two Indian states: Andhra Pradesh and Tamil Nadu. The major findings of the study were that (a) super-spreaders have fueled the epidemic with only 5% of primary cases accounting for more than 80% of secondary infections, (b) cases are more likely to infect secondary contacts of the same age, (c) children less than 14 years contribute to transmission of SARS-CoV-2 but are not necessarily the drivers of transmission, and (d) the median time to death in in these two states occurred was approximately only six days and substantially less than that observed in other settings. In addition, in a comparative analysis with the USA, the distribution of deaths leveled out for those older than 60 years in Andhra Pradesh and Tamil Nadu compared to the USA where it continued to rise sharply in older age groups. This could be due to various socio-economic factors, including a survivorship bias arising from better socio-economic conditions for older populations in India.

Speaking on evidence synthesis in the clinical management of COVID-19, *Dr. Priscilla Rupali*, Professor and Deputy Chair (Hospital Infection Control) at Christian Medical College (CMC) highlighted the use of integrated scientific research evidence to formulate treatments guidelines

for COVID-19 patients. Describing cases treated at CMC Vellore, she spoke of how clinical audits, meta-analysis, cost-effectiveness evaluation and information from drug trials such as RECOVERY were used in devising comprehensive guidelines for treatment regimens of such diseased patients.

Dr. Rajani R. Ved, former Executive Director, National Health Systems Resource Center, Ministry of Health and Family Welfare, emphasized the urgency in bridging the gap between researchers, practitioners and policymakers for effective healthcare practices in India. She underscored the need to prioritize research to meet immediate public health requirements. She said that reducing silos between public health and health research agencies was an urgent requirement. In this respect, she said that the onus was on the researchers to do so. She commented that engagement with civil society networks and NGOs must be boosted. Above all, public health decisions needed to be guided by an ethical foundation and should incorporate concerns for vulnerable sections of the society.

In his concluding remarks, *Prof. Vivekanand Jha*, Executive Director at TGIGH emphasized the relevance of such symposia in underlining the need to deriving evidence from multiple sources of data for effective decision making.

The key takeaways from the symposium are:

1. The recommendations of round 1 and 2 of national serosurveys carried out by ICMR reinforce the need for strict compliance with non-pharmacological interventions such as physical distancing, wearing masks and hand hygiene as well as the augmenting of ongoing containment measures such as testing, contact tracing, isolation and quarantine; focus on containment in urban areas. There is a need to establish district-

level facility-based sentinel sero-surveillance, a need for continued expansion of testing, especially in districts with high seroprevalence but low case reporting, for application of interventions to control transmission and for an uphauling of health facility, especially in rural areas. Running additional rounds of the national serosurveys will provide crucial information regarding the extent of the spread of COVID-19.

2. Considering that healthcare provisions in all Indian States differ, research evidence from each State will be different. Moreover, the methodologies of surveys and studies will differ too, across states. Therefore, just comparing results across states will not be meaningful and this will require more detailed analysis.
3. In the case of clinical treatments, it is essential to develop basic guidelines that can be useful for day to day treatments, based on evidence and not on personal biases.
4. There is a need to strengthen data collection on healthcare and the public health management information system especially in remote areas. Treatments of diseases in India should take into account aspects of affordability and accessibility.
5. Evidence in public health management should be beyond academic research evidence, in that it should connect such research to those responsible for implementation at the grass-roots level. Therefore, different platforms should be facilitated where policymakers, researchers, academicians, practitioners, industrialists can come together to exchange ideas, knowledge and learnings for the greater good of the country.

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