It is for the first time in recent history that almost the entire world is facing a shared threat - the COVID-19 pandemic.

Despite specific contexts and capabilities of countries and communities, there are potential lessons to be learnt from their strategies and experiences in tackling this shared threat.

Towards this end, ICRIER and the India Office of the Konrad-Adenauer-Stiftung (KAS) have come together to organize a webinar series on “COVID-19 Global Best Practices - Lessons for / from India”.

The present policy brief is based on desk research and discussions during the first webinar in this series on “Tracking COVID-19 - Public health and socioeconomic surveillance” held on 27th of April 2021. Following welcome remarks by ICRIER’s Chairperson, Mr Pramod Bhasin, and an insightful introductory address delivered by the KAS Resident Representative to India, Mr Peter Rimmele, a distinguished panel of speakers shared their views and responded to queries from the audience on COVID-19 research and surveillance. Among the speakers were Dr Roli Mathur, Head of Bioethics Unit, Indian Council of Medical Research (ICMR), Ministry of Health and Family Welfare (MoHFW), Government of India; Dr Anand Krishnan, Professor of Community Medicine at the prestigious All India Institute of Medical Sciences (AIIMS), Delhi; and Dr Shivani Patel, Assistant Professor of Global Health and Epidemiology, Rollins School of Public Health, Emory University, USA.
Following is a snapshot of COVID-19 cases and deaths in India in comparison to the global situation (11 May 2021, 19:07 CEST)
Source: https://covid19.who.int/

**23 M**
CUMULATIVE CASES

The global count was 158.7 million, with India's share at 14.5%, only behind the US. However, in the last 7 days, India added 2.7 million cases, almost 6 times more than Brazil (2nd rank) and 9 times more than the US (3rd rank). The World Health Organization (WHO) classified the SARS-CoV-2 variant (B.1.617) driving India's 2nd wave as a variant of concern (VOC) at the global level.

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CUMULATIVE DEATHS

India's share was 7.6% of the global count (3.3 million), just behind the US and Brazil. However, in the last 7 days alone, it added 27,584 deaths, nearly double that of Brazil (2nd rank), 6 times than the US (3rd rank).
Since COVID-19 seems to be here to stay, and there is a possibility of other pandemics in the future, India should set up a pandemic information system (PIS) and use the opportunity to strengthen its broader health information system (HIS) and the civil registration and vital statistics (CRVS) system. A PIS-HIS-CRVS Taskforce should be developed in the Department of Health Research, Ministry of Health & Family Welfare, to coordinate efforts with relevant central, state and local agencies.

The PIS should also include forecasting - in view of the severity of the second wave in the absence of prediction - pandemic vulnerability index as well as geographical and community profiles, especially for the most vulnerable. The Centers for Disease Control and Prevention (CDC)'s COVID Data Tracker is one example.

A public health approach to COVID-19 surveillance also needs to be adopted beyond individual testing. The CDC, for instance, has set up a National Wastewater Surveillance System (NWSS) as a public health tool to understand COVID-19 spread in the community.

Despite being a widespread crisis affecting populations around the world, COVID-19 is affecting individuals and communities differently. Given its complex mosaic of inequalities, India should aim to have data by background characteristics, as is the case with its National Family Health Survey (NFHS). An example to consider is Emory University's COVID-19 Health Equity Dashboard.

While it is critical to strengthen statistical systems, we need to bear in mind that behind those statistics, there are human beings who are suffering, there are lives and livelihoods at stake, there are destinies.
• Channels for communication of data to decision-makers should be ensured in a meaningful way so that evidence-based policymaking can happen. Presently, this is a big challenge in India. As surveillance is ultimately about action, the capacity to act is very important – the second wave has clearly demonstrated that such capacity is limited.

• At the same time, if available data is missing in terms of quality and trustworthiness, then the action is not going to be useful either.

• It is also time to develop channels of communication of data to the communities and make them partners in decision-making processes.

• G20 countries not only account for more than 80% of world GDP and 75% of global trade, but are among the top 9 countries with respect to the highest number of COVID-19 deaths (WHO - 12 May 2021, 12:16 CEST). India should lead the charge in the G20 towards international cooperation for pandemic preparedness in general, PIS in particular.

• Countries like South Korea, Australia and New Zealand have shown how we can learn from past mistakes and deploy effective, long-term solutions to any health crisis which may arise in the future. There are also lessons from countries like South Korea on how to effectively contain the spread of the virus without strictly restricting routine life.

• Greater use of Information and Communication Technology (ICT) is required to collect, analyze and disseminate the data quickly. Even agencies like the CDC look towards India to take a lead in this regard, leveraging its comparative strengths and success. India should make robust use of its ICT capabilities towards COVID-19 surveillance not only within the country, but promote internationally.
Despite an extremely limited budget, the Indian Council of Medical Research (ICMR) did a commendable job in promptly stepping up to the challenge of COVID-19 research and surveillance in a complex and large country like India. Following are some of its initiatives that offer lessons for low, middle as well as some high income countries. Research and surveillance should go hand-in-hand, especially in the case of novel threats like SARS-CoV-2. The role of ICMR is significant from this perspective too.

The ICMR instituted a multi-pronged approach to understanding the disease and tackling it through some of its work in the area of clinical management, diagnostics and epidemiology as well as building task forces, consortiums and collaborations with a variety of stakeholders.

It led major research initiatives in a timely manner - for instance, by developing and validating test-kits, establishing a network of virus diagnostic laboratories in the public and private sector and building their capacities, undertaking several serosurveys, genome sequencing consortium studies and research on animal-to-human transmissions, environmental associations, mental health and socioeconomic issues.

It developed a number of guideline documents - for instance, those related to COVID-19 death recording, clinical guidance for COVID-19 treatment and management of patients, safety protocols, etc.

It has also worked tirelessly towards setting up of a national COVID-19 clinical registry to collect high-quality, real-time data on various clinical, epidemiological and outcome aspects of the disease.
Its recent initiative is setting up of a national institute of One Health in Nagpur, which would cater to the needs of systematic studies for outbreak investigation and tackling biosafety and biosecurity issues, while enhancing the diagnostic capabilities of the country.

The ICMR Bioethics Unit has been able to play a very important role in setting up of a robust ethical framework to support COVID-related research during this challenging time. As a WHO collaborating center for strengthening ethics in biomedical health research, it responded early on, releasing guidelines in April 2020 for ethics committees that were reviewing COVID-19 research - making India one of the very first countries to have such guideline documents. These documents offer information on organizing online meetings, exploring possibilities of electronic informed consent processes, facilitating expert committee reviews so that research can continue while protecting the rights of participants. The Unit also developed standard operating procedures for fast-track review of research by ethics committees as time was of essence and research needs are really enormous at this point of time.

Lastly, the ICMR Central Ethics Committee played a very important role in reviewing research. With experts from various fields, it guided ICMR research - clinical studies and trials, epidemiological research involving plasma, serosurveys, etc. India’s sociocultural ethos and varying standards of care pose unique challenges for the application of universal ethical principles to biomedical and health research. Furthermore, dealing with people who are most vulnerable or have additional vulnerabilities due to the pandemic has been a matter of special consideration for the ICMR to duly protect them at all stages.
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