

# Strengthening Public Health Systems for COVID-19 Response

## Policy Brief

### Summary

*This policy brief highlights the need for strengthening the public health system to deal with the emerging health challenges like COVID-19. The brief also provides policy action pointers for better preparedness for future public health challenges*

### Introduction

Ever since March 11, 2020, the day when the World Health Organization (WHO) announced that the COVID-19 virus was officially a pandemic, about 210 countries and over 16,650,570 people have been affected<sup>1</sup>. The virus spread remains unabated and continues to infect more people and new geographies. This has not only stretched our healthcare infrastructure, but also its long term presence continues. The COVID-19 is not only straining the health systems worldwide; the exponential growth of the people getting affected by this is rapidly increasing the demand on health facilities and health care professionals. This is threatening to leave our public health systems unable to operate efficiently and overstretched. This requires us to analyze and develop our preparedness to COVID 19.

<sup>1</sup><https://www.worldometers.info/coronavirus/>

Through this policy brief, recommendations are shared to strengthen the health system response to COVID-19 in India and to ensure its better preparedness to deal with future health emergencies.

### Overview of Public Health in India

In India, with the world's second-highest population, the amount of pressure on the public health system is tremendous. According to the National Health Profile 2019, the average population served by the govt. MBBS doctors was 10,926 persons per doctor. There are about 8.6 lakh auxiliary nurses midwives; 20 lakh registered nurses. To serve the health needs of a country with a population of 1.3 billion, we have only 25,778 govt. hospitals and 7, 13,986 beds. In fact, the budget for managing epidemics and natural calamities had never exceeded Rs.100 crores in any year. The budget for health sector disaster preparedness and management, emergency medical relief and emergency medical services was halved in Budget Estimates (BE) of 2018-19 from what was allocated in 2016-17 (Rs. 30 crores in BE 2016-17; Rs. 16.85 crore in BE 2018-2019<sup>2</sup>). Given this scenario, it's extremely difficult to mobilize the public health system to this unprecedented crisis of COVID-19.

<sup>2</sup><https://www.indiabudget.gov.in/doc/eb/sbe42.pdf>

There are priority areas which require our immediate attention: Situational awareness in building initial response to public health emergencies, balancing of emergency response and routine operations, communication and coordination among the stakeholders/actors in the public health system, resource mobilization, capacity building and long-term management of Pandemic. These are some of the key aspects of the public health system that needs to be addressed.

### Strategies for Action

#### Using technology to draw an effective response

The initial response is key to any pandemic or public health emergency, and technology has a crucial role here. Though we are headed towards reaching peak infection, the infection rate could still be curtailed using effective technological tools. Geographic Information Systems (GIS) is playing an increasingly vital role to help authorities tackle the outbreak of diseases. Hotspot mapping, i.e. Identification of infection hotspots at ward level and the location of vulnerable groups, is critical to manage COVID. These Hotspot maps could include mapping of areas reporting a maximum number of patients to demarcate containment zones. Likewise, GPS marking of online relief measures and nearest health facilities (that provides medical treatment) should be done and disseminated to the public. Online disaggregated database on age and gender of affected patients and the mortality should be built to facilitate

dynamic response strategies for surveillance of high-risk groups and antimicrobial resistance.

#### Balancing emergency response and routine operations

Containment of the infection would require response action plans with a special emphasis on COVID-19 vulnerable age group (above 60 years). When it comes to testing, laboratory diagnosis, and confirmation capacity with clear guidelines and quality standards for COVID-19 should be established. This should include a new inventory of public and private laboratories available for such testing.

With Emergency Services prioritized for COVID19, there arises an inevitable increase in the waiting period of other critically ill patients. This will have an overwhelming impact on the already-stressed healthcare system. Hence, there is a need for a post-COVID19 action plan for Emergency Services and Trauma care in nationwide hospitals and health centres. These action plans should also include measures to combat multi-risk health emergencies amid COVID pandemic. For example, an outbreak of Dengue amid the on-going COVID 19 crisis can cause considerable distress to our healthcare system.

Healthcare workers play a central role in COVID-19 management. Many frontline doctors and nurses have already tested positive across the country. A replacement strategy for healthcare workers and an emergency backup plan is required for maintaining enough pool of doctors and nurses. Encounters with SARS and Ebola (in

Asian countries) have taught that pandemics result in psychiatric disorders, such as depression, anxiety, and posttraumatic stress disorder, developed in high-risk persons, especially survivors and frontline healthcare workers. Hence there is a need for emergency psychological crisis interventions to reduce the psychosocial effects of the COVID-19 outbreak. Hence, creating a mental health crisis evaluation and solutions at the national, regional level, and local level through nationwide generic programs. There is also an urgent need for an Assessment Plan for medical stock. A comprehensive drug assessment report should be produced for projecting the export, application and the supply of vital drugs (such as hydroxychloroquine in case of COVID-19).

#### **Coordination with stakeholders/actors in the public health system**

Clear and comprehensive mechanisms should be established for effective risk communication with the media. A periodic issuance of advisory on do's and don'ts for citizens is also critical in disseminating information to the public and will enable public participation in the containment of Pandemic. To implement this, a core response team must be formed for quick inter-ministerial coordination, so that information from different ministries remains coherent.

#### **Resource mobilization**

To deal with the sudden surge in fund requirement, a list must be prepared for the potential reallocation of the existing pool of resources, along with austerity measures to

come in force immediately after the announcement of Pandemic. Increased investment is needed to strengthen the public health care system till the grassroots level. Appropriate budgetary support guidelines need to be prepared to deal with the sudden impact on the economy in the form of bailout packages, among others.

#### **Capacity building**

Emergency preparedness in our health care system has been below par, especially for pandemics that strike very quickly, without sparing us any buffer time to prepare for the same. Our public health emergency preparedness and response plan, which includes the procedure, plans or strategies to reallocate or mobilize resources and development of surge capacity, need to be revamped and enhanced to deal with pandemics. There is also a need to prepare comprehensive guidelines/ protocols and manuals on infection prevention and control for the common public place, including hospitals, offices, homes and other institutions. Early training and workshops for medical professionals should be conducted for all medical staff, including those at the level of primary health care.

#### **Integration of Private Hospitals in Pandemic Relief**

It is important to consider the integration of the Private Health Sector in case of a public health Emergency and Pandemics like COVID-19. There should also be a standard operation protocol to regulate treatment charges in private hospitals during a public health crisis. Mechanisms must be introduced for fixing the number of beds

and treatment costs in private Hospitals to meet emergency requirements. Adequate budget allocation, both for the basic public-private healthcare system and to meet an emergency situation like Pandemic, is paramount and must be addressed on a priority basis.

### Public Health Management in a long-duration pandemic

The lockdown phase and the need for medical quarantine of individuals have revealed the need for greater preparedness for Home-based and Home quarantine. Home-based care can reduce the burden on the health care system. To make these efficient, bio-medical waste disposal guidelines should be prepared in advance for those in quarantine. Reorganization should be carried out for efficient resource utilization of the existing spaces, staffs and supplies, thereby reducing demand for the same.

India has been fortunate to have avoided a high mortality rate compared to New York and Italy. We do not know how the Pandemic will evolve in the near future and what more we would be bracing for. Some of these recommended policies should, therefore, be seriously considered and implemented in the upcoming action plans from the central and state governments.

### Conclusion

As we all are navigating this colossal challenge of COVID-19 with the focus on minimizing damage to people's lives, it also places before us an opportunity to not only improve our public health systems but also

to draw our learning from the pandemic in developing a road map for ensuring better preparedness for future scenarios. In these times of growing numbers of re-emergence of communicable diseases, viral outbreaks pose a new challenge altogether. India is not immune to future outbreaks. It has frequently encountered such outbreaks, like Nipah (2001, 2007, 2018), Ebola (2013), Zika (2016), Avian Flu (2006). With COVID-19, our response mechanisms have finally begun to function effectively, and they should be further strengthened by some of the key policy measures recommended here.

We have to be ready to deal with COVID-19 and put efforts in strengthening of our health system and formulating of integrated health policy for prioritizing investments in the public health sector.

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