

# Health Systems Preparedness during COVID-19 Pandemic: China and India

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## Summary

This commentary reviews the health systems preparedness during the COVID-19 epidemic in China and India. It provides insight into how nonmedical measures were employed to contain and control the epidemic in Wuhan which was the epicenter. The methods employed by the Chinese provided the roadmap for the countries as the epidemic became pandemic. It provides contrasts in health system preparedness between China and India.

**Key words:** China and India, COVID-19 epidemic, health systems preparedness

## INTRODUCTION

China and India are Asian giants and the most populous countries in the world. According to the Human Development Index, China is among the high rankers in the human development category, whereas India is among the lowest. The differences in the levels of economic growth and human development the two countries are due to the different trajectories of socio-political development since the late 1940s. The politics of the aftermath of the communist revolution guaranteed basic needs to a sick and poor population that had positive health benefits. India also invested in state sponsored programs for poverty alleviation but did not undertake radical structural reforms to address the inequalities.<sup>[1]</sup> At best an intervention state, India underinvested in human welfare enhancing programs as a result did not see dramatic improvements in health outcomes. Until the 1970s, China was invested in building a strong public sector with little space for private enterprises, whereas India had a weak public sector with a large, unregulated private sector. India was committed to the values of socialism and democracy, but its policies lacked the depth to address the widespread inequality. As a result, India spent less on public services that was of variable availability and accessibility as compared to China.

## Health sector reforms and commercialization of health care

The rise of neoliberal ideas globally from the late 1970s resulted in the transformation in the economy and social

sectors in both these countries.<sup>[2]</sup> There was a shift toward greater commercialization of the economy and social sectors, especially health care. This was a period of convergences in both China and India when both countries were introducing market principles into the health sector. The once integrated primary health care approach in China of the 1940s was replaced by a hospital-focused health services supported by public insurance schemes.<sup>[1]</sup> In India, a thriving, unregulated private sector coexisted with an underfunded public sector. This resulted in inequities in access and rising out-of-pocket expenditures for health. In both countries, the emphasis shifted from a comprehensive health services to a more commercialized, hospitalized care.

## Lessons from the SARS pandemic for strengthening primary health care in China

With the commercialization of health care, these inequities started surfacing in both countries. Most importantly, the excessive focus on medical care resulted in the weakening of primary level care, disease surveillance mechanisms, and

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early warning for epidemics. The first sign of these anomalies became apparent when the SARS epidemic broke out in China in 2003. The Chinese realized the need to strengthen primary level care and surveillance system. In addition, they also sought to improve coverage of public insurance schemes for hospitalization. This led to a fourteen-fold increase in the State expenditure between 2003 and 2018. The lessons from SARS hold true for COVID-19 as well. Despite increased investments, the link between primary level care and hospitals is weak.<sup>[3]</sup> Furthermore, the commercialized public hospitals have led to a fragmented health system. A weak primary care system due to a hospital based legacy is cited as the important reasons for the delayed response in controlling the COVID-19 outbreak.

### COVID-19 outbreak in Wuhan

The epicenter of the COVID-19 pandemic was in Wuhan, China. The first case was reported by a doctor in the 3<sup>rd</sup> week of December but was not taken seriously by the Chinese health authorities. By the end of January, the number of cases and deaths due to COVID-19 had spiraled, and the Chinese had to take the extreme measures of quarantine and lockdown to contain the disease. One needs to examine the reasons for the delay in dealing with this outbreak and the fault lines within the Chinese health-care system. Some of these reasons were well recognized when the SARS epidemic broke out in 2003, and there were the efforts to improve the primary level care and strengthen the surveillance systems for disease outbreaks. Although the Chinese government has been emphasizing the need to strengthen primary level care, this was not fully achieved. The hospital-dominated system produced changes in patient behavior. It was observed that even for minor ailments, patients were going to secondary and tertiary hospitals rather than utilizing services from the Community Health Centers (CHCs). Although the Chinese government emphasized the role of the CHCs during the epidemic, the evidence showed that a substantial number of them were not adequately equipped to deal with the emergency in Wuhan. Once the cases started rising in Wuhan, it was the quick nonmedical responses that were primary in containing the epidemic. These responses included physical distancing and lockdown measures. The Chinese government declared the epidemic as a national public health emergency and from then on the speed of response was the key to containing the epidemic.

### Health preparedness measures

Several measures of health system preparedness were put in place and the lessons from handling the SARS epidemic provided a template. The measures adopted included active house to house surveillance, surveillance of individuals with smartphones, temperature surveillance in public places, contact tracing, and containment and physical distancing. The measures advanced by the Chinese have now been adapted and adopted by the developed and developing countries as the pandemic spread. Another important aspect of preparedness was the quickness with which the Chinese invested in developing

Rapid Diagnostic Testing kits, Personal Protection Equipment for health personnel, and ensuring availability of hospital beds, oxygen, laboratory facilities, ventilators, and other supportive intensive care unit equipment. In order to ensure that no one is denied care, testing was free for all with expenses being borne by the government.<sup>[4]</sup> Similarly, the scope of the insurance was expanded to cover the costs of hospitalization and supply of routine prescription medication was ensured and a system for delivery was put in place. In order to address routine care, all hospitals had online consultation arrangements in several provinces.<sup>[5]</sup> Available data show a rise in online consultations through telemedicine in China during the period of lockdown.<sup>[6]</sup>

The centralized command system ensured that all provinces were carefully monitored during this period of crisis. Given the demographic profile of China, the elderly form a substantial percentage of the population. Since majority of them suffer from comorbidities, the need for hospitals and beds at the top tier became a constraint. The Chinese responded to this by increasing hospitals and beds to cope with the increasing demand.

### India's health system preparedness

Compared to China, the preparedness of India presented tremendous variation across states. First, weaknesses in the public system proved to be a challenge and the availability of Personal Protection Equipments (PPEs), testing kits and supportive equipment was in short supply. The indigenous capacity to produce protective equipment for health workers, oxygen supply and ventilators was an issue. While some states such as Kerala planned well but several others were caught unawares as cases started rising.<sup>[6]</sup> The Central Government declared a national lockdown without adequate health system or human mobility preparedness. State governments were left to find ways to cope with the COVID-19 crisis. There was much variation in the outbreak and response to the epidemic depending on the robustness of public health services.<sup>[7]</sup>

The poor management of the economic fallout of the lockdown resulted in a humanitarian crisis when millions of migrants were stranded. The lack of adequate supply of PPEs for health personnel posed a crisis for health system responsiveness. Health personnel were contracting the disease due to inadequate protection and were stigmatized by the general public too. The delay in initiating testing facilities, lack of Rapid Diagnostic Testing Kits (RDTs) was the obvious fault lines of the Indian health service system. To this date, the unwillingness to requisition private facilities to support patient care only adds to the inability of the Indian state to respond to an emergency.

One of the important lessons from the COVID-19 epidemic for all countries is that public health systems have been systematically undermined by decades of conscious commercialization. It has shown how a weak primary health-care system is unable to predict, act, and manage situations such as the present epidemic. It also highlights the need for strong social and health security measures that will not exclude those who are unable to pay for care.

Although the aftermath of the COVID-19 epidemic provides an opportunity to reimagine and build public health systems one does not know how this will translate in political terms. In the Indian case, there are no signals that one can read from the political establishment in terms of increase in public spending neither on health nor of any fiscal devolution to state governments. Majority of state governments have seen fall in revenues as they have to address the exigencies of meeting health service and social welfare needs arising from the COVID epidemic. In China, there is a much clearer response to the crisis with specific measures that they propose to undertake.<sup>[8]</sup> The 13<sup>th</sup> 5 years plan clearly spells out greater strengthening of hospital and primary health care with increased investments. They also plan to invest much more in telemedicine and encourage partnerships with the private sector in future.

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