

Epidemics and their Urban Context: COVID-19 and Lessons from Wuhan

Madhurima Nundy

Fellow, Institute of Chinese Studies, Delhi

madhurima.nundy@gmail.com

Infectious diseases and urban context

The impact of COVID-19 has been unprecedented across the world and urban cities have faced it in full force and are among the worst affected. It began in the city of Wuhan in China and spread to other cities within and outside China. In India too, most metropolitan cities especially Delhi, Mumbai and Ahmedabad have the maximum number of cases and these numbers are increasing as we speak. Once infections emerge in or reach urban centres, they tend to progress rapidly. Even in normal circumstances urban settings are challenged with huge density of population in housing, workplaces as well as in the use of public transportation and public spaces. All these challenges become pronounced in times of outbreaks.

Maximum economic activities occur in urban centres that comprise of a heterogeneous population that includes a large working class population and a globalised heterogeneous middle class. The former is mostly invisible but are the ones who make the city function on a daily basis and drive the economy. They constitute of migrants who come from rural areas to work in various capacities – as workers in manufacturing industries, construction sites, street-vendors, restaurant

workers, delivery people, domestic workers and so on. On the other side of the spectrum is the globalised middle class in their own gated residential communities with access to all basic facilities and connected to the larger world. The structural inequalities in cities are apparent in access to housing, clean water, sanitation, food, health care, education and so on. Most of the working class population have limited access to resources and struggle to survive on an everyday basis. Civic authorities are also harsher towards them and so is the middle and upper-middle classes who need them as labour but are constantly ‘othering’, marginalising and excluding them. They are viewed as carriers and vectors of germs and infections. COVID-19 has shown the disproportionate impact on the working classes.

Emergence of COVID-19 in Wuhan

COVID-19 emerged in Wuhan, a second-tier city in Hubei province of central China, which went on to become the first epicentre of the epidemic before it moved to western countries. Wuhan has similar characteristics as any other urban centre - an important hub for trade, commerce, political and educational activities, high density of population, high volume of public transportation, governance by local authorities and multiple channels of communication and, heterogeneous sub-populations including a large migrant

population. To top it all the virus affected the city during the period before the spring festival when there was maximum mobility within and across provinces in China.

As the epicentre, Wuhan has had to manage a huge population of 11 million residents including a mobile population that includes a large migrant community. It witnessed 97 per cent of all deaths in China (total deaths reported were 4,637) and over 80 per cent of all cases (total cases reported were 83,968) as of early May (Coronavirus Resource Centre 2020). It was reported that five million people left the city before the lockdown that was put into action on 23 January 2020 with nine million people remaining in the city. Official data showed that nearly 70 per cent of the five million were in the Hubei province itself, and the rest had gone to other provinces and cities (Collman 2020). The day the lockdown in Wuhan was called there were a total of 375 cases in Hubei and 571 cases in entire China (WHO 2020).

There were ethical concerns raised on quarantining an entire city in order to protect the rest of the country.

Wuhan underwent the largest community quarantine exercise and has only recently lifted the lockdown. The lockdown was extended to the entire province of Hubei of 60 million people in February 2020. China faced severe criticism from the rest of the world over locking down an entire city given the huge human and economic cost it would entail. There were ethical concerns raised on quarantining an entire city in order to protect the rest of the country. One might argue that only an 'authoritarian' country like China managed to seal one of its cities completely, which would not be possible in other liberal democracies. As we know this has now been proved wrong, as countries across the world are responding almost similarly and as we speak, the entire country of the South Asian sub-continent, India is under a lockdown. What is important to understand is the strategy for the lockdown undertaken by Wuhan, how was

the infection managed, how were the health services organised, how were residents supported and how the city was able to finally emerge out of this difficult phase after 76 days of lockdown. What has been the experience in India and are there any lessons for us?

Health services response

The SARS epidemic of 2003 was a wakeup call for China's dismal health services. What followed was almost two decades of health sector reforms and rectifications to strengthen many systems, build capacities that brought in new challenges. Greater investments were made to increase access to public health service systems and to strengthen surveillance systems, to avert, recognise and manage epidemics in the future. The government enhanced capacities of infectious disease surveillance and built the web-based Notifiable Infectious Diseases Reporting Information System in 2004. Health care institutes were enabled to notify infectious diseases in real time. China's health care investments have increased multiple-fold since SARS. While there have been tremendous improvements in the health services, over the years China's health care system has become hospital-based with a weak primary level of care and a fragmented system.

The initial reports coming out of Wuhan in January noted how the public hospitals were overwhelmed. This brought forth the shortcomings of the system as people tend to go to tertiary hospitals as first point of contact to seek care bypassing the primary level, which is weak in most places apart from first-tier cities. The hospitals therefore, were not prepared to handle the surge of patients, were unequipped in terms of diagnostics, lacked the human resource capacity and didn't have effective communication channels. The primary health care infrastructure was not fully functional. Therefore, patients seemed to concentrate at the hospitals from where the infection spread faster. To accommodate the growing volume of sick people, once it was recognised that there was human to human transmission, the Wuhan government built two makeshift hospitals of 1000 beds each in a matter of 10 days. The Chinese have such

capacities to build at a fast pace when the need arises and they were able to achieve this feat even at this critical time. Wuhan also fell short of health personnel - 40,000 were dispatched from other provinces before the virus reached its peak. Over the years, China has also increased its capacity for research and development in the area of infectious diseases, technology and drugs. Public health institutions play a dominant role in people's lives and is what people trust. The public sector has been at the forefront in dealing with COVID treatment and management. It was also much better prepared than previous times. Private sector hospitals are far and few but are gradually increasing in number. Some of the older ones like the United Hospitals Group were involved in providing beds for COVID patients in other cities.

One issue that arose is the cost of treatment for sick patients. China has improved its access to medical care in the last two decades but there is much to be desired still. In these times, one important lesson has been that governments have to be willing and should pay for tests and treatment of affected people. Even in China there were instances of out-of-pocket expenses for some services, while some other services were being handled by their social insurance schemes (Zhuang 2020).

The inability of the government to negotiate with the private sector on testing, on treatment or for providing beds to patients is apparent.

China has a dominant and a strong public health system that has been able to come together to manage the epidemic. India has a weak and underfunded public health service system and also faces the dual challenge of a vast unregulated private health care sector. Most hospitals are located in urban centres. One reason India called for a nation-wide lockdown, the most aggressive among nations, is the fear that hospitals would be unable to manage the load once the cases start rising exponentially. The public sector has been unable to engage with the private sector

effectively in collaborating to provide free services during the time of the pandemic. The inability of the government to negotiate with the private sector for testing, for treatment or for providing beds to patients is apparent. According to a report on role of private sector in COVID, "*Private hospitals, which account for two-thirds of hospital beds in India, and almost 80 per cent of available ventilators, are handling less than 10 per cent of this critical load*" (Raghavan et al. 2020). Most of the private sector are billing hefty amounts to COVID patients. Baru notes, "*The preparedness of private hospitals in dealing with the COVID-19 epidemic and the extremely variable quality of services in the poorly regulated private sector is now becoming apparent. Even internationally accredited hospitals in Mumbai and Delhi were ill-prepared to deal with the outbreak of coronavirus.*" (Baru 2020)

The public hospitals on the other hand have risen to the occasion despite being understaffed, lacking capacities to handle surge of patients due to which all regular out-patient activities have been stalled. Since all public hospitals have converted to COVID hospitals, non-COVID patients are in precarious conditions due to inaccessible services. It makes the poor who have limited options more vulnerable in the absence of a strong public health system.

Impact on migrants and unorganised workers

We assume that epidemics and pandemics are equalisers, that anyone could get infected, but most of the times the poor are the most vulnerable. With limited resources, congested living arrangements and low immunity, they are susceptible to get affected disproportionately. In the COVID-19 case, the elderly have also been severely affected. 60 million people were locked down in Hubei province among which many were migrant workers who had returned to Hubei for the spring festival and were unable to return to work thereafter due to the lockdown. As in India, even in China migrants struggled with no income and growing personal debt. There were several stories of distress that migrants went through (He 2020). It was also the

migrant community that built the hospitals for COVID patients in a short span and many were also left without payments and had to fend for themselves. In other positive stories, migrants were given alternate work when things began easing a bit in Wuhan. Many of them were redirected to deliver food to residents and were employed by restaurants and food delivery companies. Now that the lockdown is over, migrants are slowly being brought back to work through special transport from their homes to the factories.

In India, there was no plan on how to protect the large mobile population of unorganised workers. There was no plan to help them safely reach their homes before the lockdown. Many migrants were seen walking to their homes few hundred miles away from the cities. They were completely left on their own. Before calling for the lockdown, there was no preparedness for food and income security for the vast population. It showed the government's apathy towards this section of the population. Many have lost their jobs and the severe crisis that a huge section of the population will face will unfold over the coming months.

Direct cash transfers as the Indian government has done for a section of poor people has not been effective due to the inability of banks to function.

Food Security

Access to food during the lockdown was one of the greatest concerns in China. How does one access food while restraining mobility? Despite these concerns food prices remained stable in China. The local governments gave a boost to online food stores and markets. People were able to access produce through online retail stores. The urban food security programme in China also has what is called 'the vegetable basket'. The programme that was initiated in 1988, mandates local governments to provide affordable non-grain food. Wuhan is one of the major cities part of this programme that was able to adapt the programme during COVID-19. China also has food reserves like the public

distribution system in India. It stores surplus grains at minimum procurement price. During the pandemic, the government released grains for the major cities (Zhenzhong 2020). Apart from these systems, local government officials mobilised the civil society and local volunteers to ensure that food reached people's houses especially those who were vulnerable like the elderly and could not come out of their homes.

The lockdown brought forth the lacunae in India's food security and the non-performing public distribution system which has 70 million tonnes of surplus grain in storage. During these times, it is the civil society that has come forward to provide food to the workers and their families in an organised way but obviously this is not universal. Government food distribution systems have not reached universally and there were long queues of people observed in the cities for getting a single meal.

Clearly public health systems and other public services have to function effectively to ensure food security for all people in a city during emergencies of this nature. Local governments need to reach out especially to those who are losing their daily wages. People with low immunity are also susceptible to getting infections and unable to fight back. Direct cash transfers as the Indian government has done for a section of poor people has not been effective due to the inability of banks to function. There have to be other ways to protect people and provide people food and income security with dignity.

Exiting the lockdown

This has been and will be the greatest challenge for cities across the world. How should one exit the lockdown? Wuhan has shown the world how it is easing the lockdown. Although the city opened its public transport system, air travel and railways, only those whose travel was imperative were allowed, remaining were asked to avoid non-essential travel. People especially elderly and those with chronic conditions have still been asked to stay indoors. Since the behaviour of the virus is still unknown, there is a fear of a second wave of infections. Social distancing and use of masks

continue. Offices have partially opened, those essential to trade have been allowed, the rest have been told to work from home as much as they can. After all the efforts to contain the spread of the virus there is a realisation that the world has to live with it. This has also been a practical outlook since the massive halt of the economy is now showing adverse effects and will take a long time to recover.

There is a combination of interventions that work in mitigating an epidemic and a lot of it is common sense.

Centre-Province dynamics

Although there are many lessons to be learnt from China about the management of COVID, there are also many that suggest that things could have been better. Some scholars blame the constraints on ‘fragmented bureaucracy’ (He Jingwei 2020). The initial disclosure of information of this kind requires authorisation from the Centre and many pre-emptive measures would not be introduced until the State Council specifically asked the local government to take charge. According to He Jingwei, “Administrative divisions are natural and exist in almost every government system. However, in China, the vertical chain, especially in health care, is usually weaker than, if not subordinate to, the territorial horizontal authorities, making it often impossible to ‘speak truth to power’.” There was an initial denial and delayed acknowledgement of the new infection which helped the virus escape to other provinces and then to other countries. Concerns of the Party are always there about social stability, economic performances and city image and so on. Even though lot has improved since SARS much still needs to be achieved (He Jingwei 2020)

Health is a state subject in India too but the centre invoked the colonial law on Epidemic Diseases of 1897. It also announced the blanket lockdown. The issue is of resources, priorities and preparedness is the concern of the states

but they were not given much choice. There have been varied responses from across the states. Kerala has been an outlier. There are several other models too that are being hailed within India but Kerala government’s response has been comprehensive in terms of testing, contact tracing, public health service response, and providing food security to all vulnerable communities through several feeding programmes and voluntary groups. Cities in North Kerala were most affected and unlike other states in India, Kerala had started preparing by creating rapid response teams at the level of local governments in January itself with the knowledge that many young people from the state were studying in Wuhan and could be potential carriers of the virus on their return.

Challenges and lessons for India

“The ongoing pandemic of COVID-19 is a strong reminder that urbanisation has changed the way that people and communities live, work, and interact, and the need to strengthen systems and local capacities to prevent the spread of infectious diseases is urgent. As a global community, we must collectively invest in and build strong preparedness systems that are better adapted to increasingly urbanised settings.” (Lee et al. 2020)

There is a combination of interventions that work in mitigating an epidemic and a lot of it is common sense. A lot is not known of China’s responses and many have questioned the data coming out of China but we do know that China had better preparedness than India to respond more effectively to the epidemic. While the aggressive lockdown was brought in early in India so as to push back the wave of cases that might have hit if such strict action was not taken, the lockdown period has not been planned or utilised effectively. India has been able to stagger the cases but they are still on the rise. Cities in India are facing challenges in all three fronts – a weak public health service system, lack of food and income security for the large unorganised working class population, lack of communication by the centre and state representatives to their people.

There is no one-size-fit-all plan in these cases. All countries and within countries, provinces, states, and cities have to adapt to their local contexts to effectively respond to an epidemic of such proportion. A lot is to do with existing resources and systems. Weak public systems cannot be hauled up to suddenly be efficient and responsive, an already non-compliant, unregulated private sector will refuse to engage and comply at a short notice to work in tandem with the public sector. It is therefore of utmost importance that there be adequate resources invested in public health services, food distribution systems, social security measures for workers and effective communication by centre and states so as to gain public trust, in order to deal with such emergencies in a coherent way, and not in panic.

References

- Baru, R. V. 2020. 'The Government Must Stop Appeasing the Private Healthcare Sector', *The Hindu*, 3 April, <https://www.thehindu.com/opinion/lead/making-the-private-sector-care-for-public-health/article31241291.ece> (accessed on 4 May 2020).
- Collman, A. 2020. '5 million people left Wuhan before China quarantined the city to contain the coronavirus outbreak', <https://www.businessinsider.in/science/news/5-million-people-left-wuhan-before-china-quarantined-the-city-to-contain-the-coronavirus-outbreak/articleshow/73677674.cms> (accessed 4 May 2020).
- Coronavirus Resource Centre. 2020. 'COVID-19 Dashboard', Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU), <https://coronavirus.jhu.edu/map.html>, (accessed on 28 April 2020).
- He, H. 2020. 'Coronavirus: Hubei's migrant workers "living in fear" as debts mount under lockdown', *South China Morning Post*, 18 March, <https://www.scmp.com/economy/china-economy/article/3075732/coronavirus-hubeis-migrant-workers-living-fear-debts-mount>, (accessed on 2 May 2020).
- He Jingwei, A., 2020. 'China coronavirus crisis: Beijing is marshalling its formidable bureaucracy – but at what cost?', *South China Morning Post*, 1 February, <https://www.scmp.com/comment/opinion/article/3048268/china-coronavirus-crisis-beijing-marshalling-its-formidable> (accessed on 1 May 2020).
- Lee, V.J., M. Ho, K. Chen Wen, X. Aguilera, D. Heymann and A. Wilder-Smith. 2020. 'Epidemic preparedness in urban settings: new challenges and opportunities', *The Lancet*, 27 March, [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(20\)30249-8/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30249-8/fulltext) (accessed on 28 April 2020).
- Leng, S. 2020. 'Coronavirus: could China's lockdowns to contain Covid-19 be the best choice for every country?', *South China Morning Post*, 16 April, <https://www.scmp.com/economy/china-economy/article/3080038/coronavirus-could-chinas-blanket-lockdowns-contain-covid-19> (accessed on 3 May 2020).
- Raghavan, P., T. Barnagarwala and A. Ghosh. 2020. 'Covid fight: Govt system in front, private hospitals do the distancing', *The Indian Express*, 30 April, <https://indianexpress.com/article/india/coronavirus-covid-19-private-hospitals-6385631/> (accessed on 30 April 2020).
- Zhenzhong, Si. 2020. 'Lessons from China: Ensuring no one goes hungry during coronavirus lockdowns', *The Conversation*, 9 April, <https://theconversation.com/lessons-from-china-ensuring-no-one-goes-hungry-during-coronavirus-lockdowns-135781> (accessed on 2 May 2020).
- Zhuang, P. 2020. 'A coronavirus lesson from China: don't make patients pay for tests and treatment', *South China Morning Post*, 11 March, <https://www.scmp.com/news/china/society/article/3074506/coronavirus-lesson-china-dont>

[make-patients-pay-tests-and](#) (accessed 3 May 2020).

WHO. 2020. Situation Report 3. Coronavirus disease (COVID 2019) situation reports, https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200123-sitrep-3-2019-ncov.pdf?sfvrsn=d6d23643_8 (accessed 3 May 2020).

The views expressed here are those of the author and not necessarily of the Institute of Chinese Studies.

ICS ANALYSIS *Back Issues*

Issue No/ Month	Title	Author
No.99 April 2020	Tracing the Informal: Analyzing Labour Legislation in China	Reeja Nair
No.98 April 2020	China's Post COVID-19 Path to Normalcy: Parallels for India	Santosh Pai
No.97 April 2020	China's Capabilities in Disruptive Technologies and its Implications	Lt. General SL Narasimhan
No.96 April 2020	What does the Pandemic of COVID-19 Tell Us About the Economic Security as a Factor of Competitiveness? An Exercise on China	Elena G Popkova and Bruos S Sergi
No.95 April 2020	Asia's Geopolitical Challenges and Future Order: China Factor	Biren Nanda
No.94 Mar 2020	China's Foray into the South Pacific: The Next Frontier?	Anil Wadhwa
No.93 Mar 2020	Europe's New Role in the Indo-Pacific	Christian Wagner
No.92 Mar 2020	The US Free and Open Indo-Pacific Initiative: Maintaining Free Trade Connectivity Across Asia	David Arase
No 91 Mar 2020	Xi Jinping and Chinese Power	Richard McGregor
No 90 Mar 2020	Informal Meetings in Foreign Policy	Anu

PRINCIPAL SUPPORTERS TO ICS RESEARCH FUND

TATA TRUSTS



MINISTRY OF EXTERNAL AFFAIRS
GOVERNMENT OF INDIA



INDIAN COUNCIL OF
SOCIAL SCIENCE RESEARCH

GARGI AND VIDYA
PRAKASH DUTT FOUNDATION



JAMNALAL BAJAJ
FOUNDATION

PIROJSHA GODREJ FOUNDATION

ICS PUBLICATIONS



A short brief on a topic of contemporary interest with policy-related inputs



Platform for ongoing research of the ICS faculty and associates



Authored by the faculty, also emerging from research projects and international conferences



Draft paper of ongoing research

ICS JOURNAL



In its 55th year, *China Report* is a refereed journal in the field of social sciences and international relations. It welcomes and offers a platform for original research from a multi-disciplinary perspective, in new and emerging areas, by scholars and research students. It seeks to promote analysis and vigorous debate on all aspects of Sino-Indian relations, India-China comparative studies and multilateral and bilateral initiatives and collaborations across Asia.

China Report is brought out by Sage Publications Ltd, New Delhi.

Editor
Associate Editor
Assistant Editor
Book Review Editor

Sreemati Chakrabarti
G. Balachandirane
Rityusha Mani Tiwari
Vijay K Nambiar



INSTITUTE OF CHINESE STUDIES

8/17, Sri Ram Road, Civil Lines,
Delhi 110054, INDIA

T: +91 (0) 11 2393 8202

F: +91 (0) 11 2383 0728

<http://www.icsin.org/>

info@icsin.org

twitter.com/ics_delhi facebook.com/icsin.delhi
[ln.linkedin.com/icsdelhi](https://in.linkedin.com/icsdelhi) soundcloud.com/ICSIN
youtube.com/ICSWEB instagram.com/icsdelhi