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EAI COMMENTARY

No. 15 7 April 2020

Social Resilience and the Pandemic

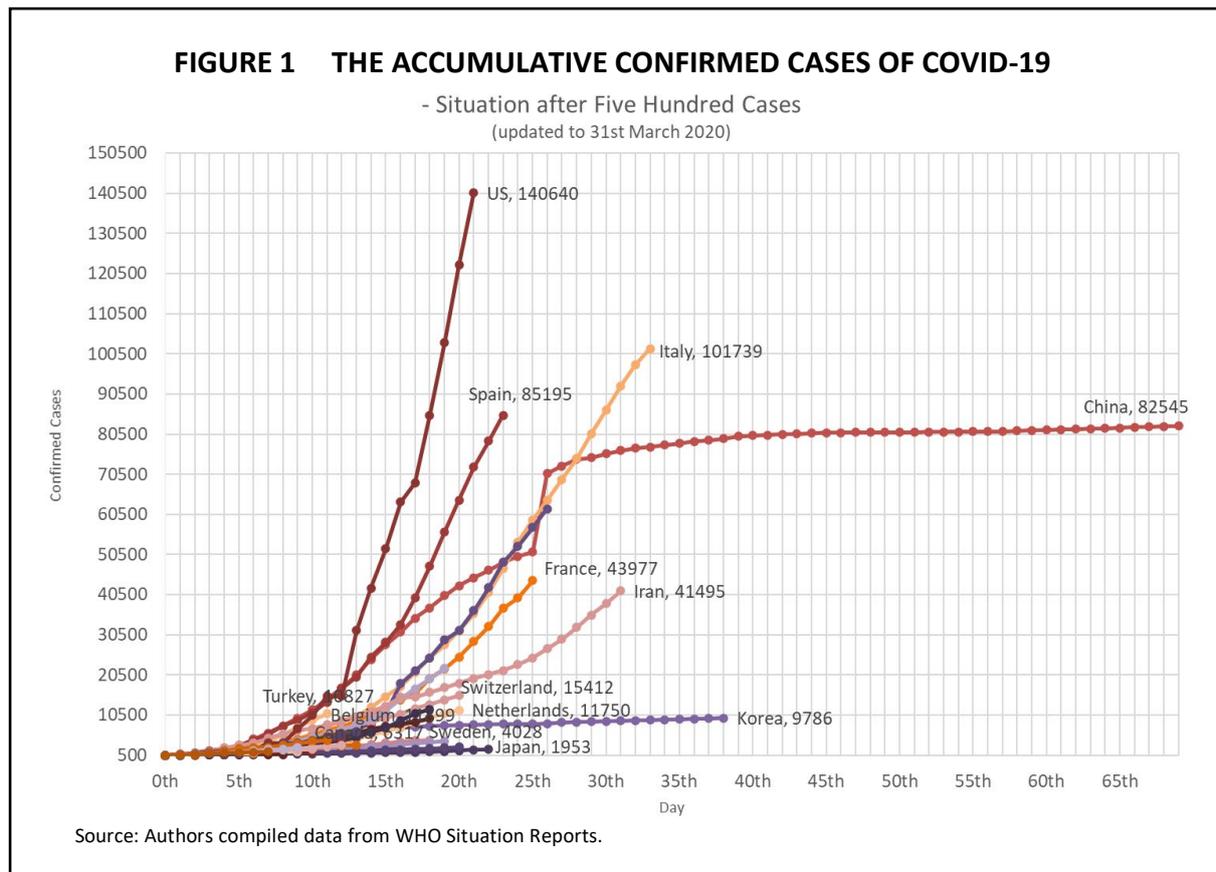
By ZHAO Litao and KONG Tuan Yuen

The novel coronavirus known as COVID-19 has become a global pandemic. The first wave of outbreak—with Chinese city Wuhan as the epicentre—was largely over by the end of March 2020. Now the second wave has shifted its epicentre to Europe and the United States (see Figure 1 for infection trajectories in major countries). The second wave is likely to be followed by a third one, particularly in densely populated regions/countries with a much less well developed public health system.

It is amply clear by now that the COVID-19 pandemic is much more damaging than the 2003 SARS outbreak, in terms of life losses, sufferings, stresses, and economic and social disruptions. The situation will get worse before getting better in many parts of the world.

It is also overwhelmingly clear that there are effective ways to deal with unprecedented challenges. East Asian countries/territories such as South Korea, Taiwan, Hong Kong and Singapore have emerged strongly from the first wave.

Wuhan's experience is even more telling. For one, it shows how the situation could turn really bad in a matter of weeks if little is done. For another, it shows that even if mistakes had been made, a turnaround is still possible if extra efforts and measures are put in place. Like Wuhan, many countries have missed the critical window of early response; some have an even steeper infection curve (see Figure 1). Nevertheless, late action is better than no action.



The fight against the virus is not over for East Asian societies. They are facing the second wave of infections as their citizens return from Europe and the United States. However they have gained experience and confidence from their encounter with the first wave of outbreak.

Resilience Deficiency

A full review of what works against the COVID-19 is only possible when the pandemic is contained and a full range of evidence is available. Nonetheless, disaster research has highlighted the importance of resilience. For instance, after the 2005 Hurricane Katrina, the National Research Council of the United States issued a report *Disaster Resilience: A National Imperative*. The report identified six dimensions of resilience: social, economic, community, political/institutional, housing/infrastructure and natural/environmental. It called for resilience efforts at the national, state, regional and community levels.

The idea of disaster resilience is drawn from a much wider literature, which defines resilience as the ability to *prepare for*, *adapt to* and *recover from* adversity. It applies to the individual, family, community and society. At the individual level, there is ample evidence that a resilient child from a disadvantaged family can “beat the odds” and do well in school; a resilient young adult from a dysfunctional neighbourhood would look for a stable job and stay away from drugs and crimes; and a resilient older adult is often happier and healthier despite stresses and strains in the earlier life stages.

Resilience also exists at the community and society level. While psychological resilience helps individuals to “beat the odds”, social resilience as a public good helps “shape the odds”. A resilient community and society is conducive to collective efforts at emergency responses and reliefs. Social resilience is particularly important in large-scale emergencies that unexpectedly disrupt or simply overwhelm formal institutions and systems. In such circumstances, social resilience plays the role of social safety net by providing mutual help, reducing panic behaviours, and “buying time” for formal institutions to re-group and re-start.

The problem is that most countries do not have a sufficiently resilient system against the pandemic. With the exception of a small number of East Asian societies, most countries fall short in one or more aspects of resilience. In terms of *preparedness*, few governments are willing to move ahead of the infection curve; in terms of *adaptation*, for quite some time, precautionary measures such as mask wearing and home stay are ignored or even resisted. As for *recovery*, most countries are still at the “phase-in” stage.

Why resilience deficiency? This is the big question posed by the 2020 pandemic and one already widely recognised in countries hard hit by the second wave of the virus outbreak. According to a large-scale international survey done by a group of researchers from Harvard, Cambridge and other institutions between 20 March and 30 March, many people in these countries believe that their government is “untruthful” and/or their action against the virus is “insufficient”.¹ Public opinions can shift, depending on how fast a turnaround can come and at what cost.

Two Trajectories

From a comparative perspective, smaller East Asian societies—South Korea, Taiwan, Hong Kong and Singapore—have demonstrated a high level of preparedness and adaptation in the fight against the virus. They have acted quickly and early, adopting and adjusting pre-emptive and precautionary measures to stay ahead of the infection curve. Specific measures may vary, but they have much in common, in terms of the strategy of early detection, isolation and treatment; the emphasis is on contact tracing, personal hygiene and social distancing, and the “whole-of-government” and “whole-of-society” approach (to mobilise collective efforts and practise social responsibility).

Wuhan—a city of 11 million residents—represents a different trajectory. It has displayed both fragility and resilience in the past three months. Fragility prevailed in January and early February caused by earlier mistakes of information cover-up and exacerbated by ill-prepared and inexperienced emergency responses up to mid-February. Wuhan’s health-care system had nearly stumbled.

However this did not spell the end of days for Wuhan. After the central government stepped in, it shifted to a totally different track. First was the lockdown of the city on 23 January, followed by the building of makeshift hospitals, a few rounds of citywide screening of all suspected

¹ For information on the survey, see <https://covid19-survey.org/index.html>; for a discussion, see Bert Hofman (2020), “The COVID-19 Pandemic”, EAI Commentary, No. 14, 1 April 2020, available at <https://research.nus.edu.sg/eai/wp-content/uploads/sites/2/2020/04/EAIC-14-20200401.pdf>, accessed 6 April 2020.

cases and a reshuffling of local leadership on 13 February.² By late March, Wuhan had brought the number of new infections down to zero or nearly zero. The quick turnaround is a testimony of Wuhan's resilience.

Understanding the Turnaround

Wuhan's quick turnaround is not possible if the city is fighting a lone war. It is also not possible if resilience efforts from Wuhan residents are lacking. The two factors—external help and self-help—combined to produce a quick turnaround, though a full recovery takes a much longer time and requires a new set of measures.

External help is guided by a national consensus that “if Wuhan city is saved, Hubei province would be saved; if Hubei is saved, the whole of China would be saved”. Underpinning this consensus is the value of mutual help as reflected in a Chinese saying, “one in trouble, all will help” (一方有难，八方支援). History plays a part here. The legend of Yu the Great taming the flood (大禹治水) 4,000 years ago is known to every Chinese. It teaches them that disasters such as floods and epidemics are a normal part of Chinese history and can be controlled by collective efforts under a great leader.

Help has come from all walks of life in many different forms. Experts have provided important opinions and advisories. Zhong Nanshan, a renowned epidemiologist based in Guangdong, first spoke on national TV about the human-to-human transmission of the virus. Li Lanjuan, another renowned epidemiologist based in Zhejiang, proposed to impose lockdown of Wuhan, a measure that may have helped prevent 744,000 infections in the rest of the country by mid-February, according to a recent study published in *Science*.³ Wang Chen, vice-president of the Chinese Academy of Engineering and president of the Peking Union Medical College, proposed to build “fangcang” makeshift hospitals (方舱医院), which a *Lancet* article regards as a novel public health concept and a powerful component in national responses to the COVID-19 pandemic.⁴

For the first time, China's technologically savvy companies had moved to the forefront of resilience efforts. Logistics was crucial for the lifeline of the 11 million Wuhan residents under the lockdown. The two high-tech giants—Tencent and Alibaba—not only led China's corporate philanthropy, but also acted as a technology pillar behind the complex and vast scale logistic operation. In addition, they provided platforms and apps for millions of communities, workplaces and schools across the country to manage health information, organise teleconferencing and conduct E-teaching/learning. Other players, including ride-hailing

² See Zhao Litao (2020), “Wuhan's Combat against Coronavirus: Making Mobilisation Work”, *EAI Commentary*, No. 11, 27 February 2020, <https://research.nus.edu.sg/eai/wp-content/uploads/sites/2/2020/03/EAIC-11-20200227.pdf>, accessed 6 April 2020.

³ <https://science.sciencemag.org/content/early/2020/03/30/science.abb6105>, accessed 6 April 2020.

⁴ Fangcang shelter hospitals have “three key characteristics (rapid construction, massive scale and low cost) and five essential functions (isolation, triage, basic medical care, frequent monitoring and rapid referral, and essential living and social engagement)”. See [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30744-3/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30744-3/fulltext), accessed 6 April 2020.

companies, private couriers and food delivery platforms, had joined in by leveraging their own expertise and capacity.

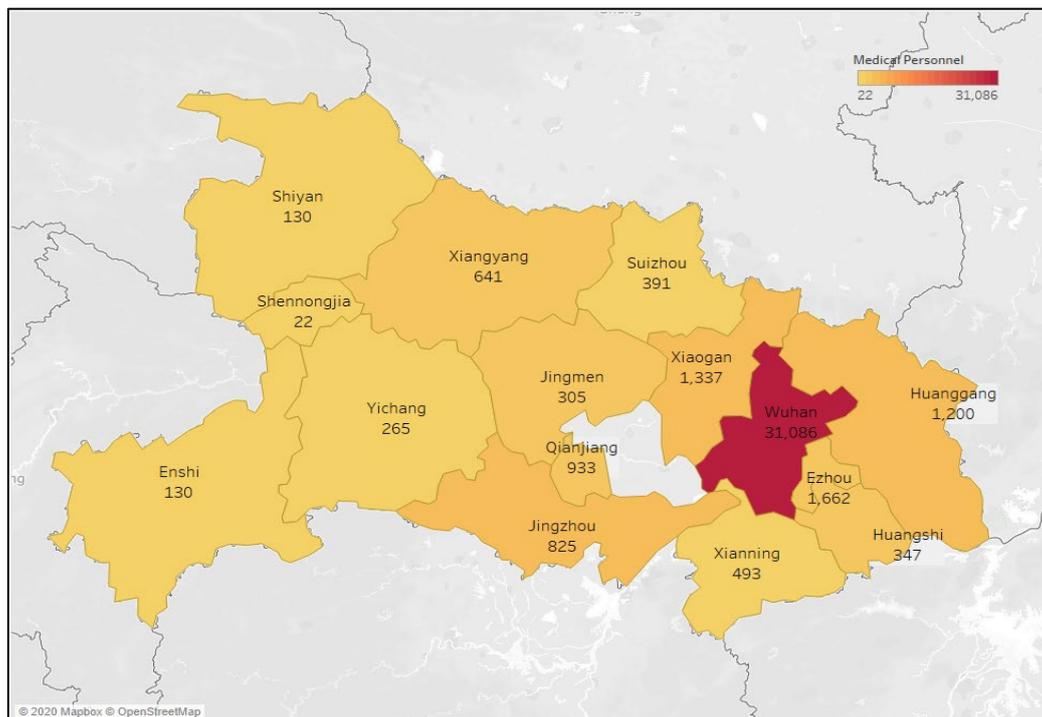
Help also came from ordinary individuals, who helped out as truck drivers to Wuhan (at great inconvenience), as construction workers, technicians or engineers at the site of makeshift hospitals, as charity organisers or participants to help Wuhan’s frontline workers, or as concerned citizens who care about Wuhan’s situation. Private help—either emotional or material—to friends or family members staying in Wuhan was also an important part of resilience efforts.

The Chinese government had capitalised on social sentiments and values to fight the virus in a “whole-of-government” and “whole-of-society” manner. On the medical front, the practice of “paired assistance” (对口支援) had been activated, with one or more provinces sending medical staff and supplies to a designated city/prefecture in Hubei (see Figures 2 and 3). In total, 344 medical teams have been sent to Wuhan and other cities in Hubei, involving 11,416 doctors and 28,679 nurses. Remarkably, about 10% of China’s total workforce in the intensive care units (ICUs)—or 11,000 in absolute number—was dispatched to Hubei. Owing to “paired assistance”, Wuhan’s healthcare system was able to make a remarkable comeback.

FIGURE 2 MEDICAL PERSONNEL FROM OTHER PROVINCES TO HUBEI



Source: Data compiled from *Renmin Ribao* (5 March 2020) and *ChinaNews.com* (16 March 2020).

FIGURE 3 MEDICAL PERSONNEL DISPATCHED TO PREFECTURES IN HUBEI

Source: Data compiled from *Renmin Ribao* (5 March 2020) and *ChinaNews.com* (16 March 2020).

National mobilisation of “paired assistance” is certainly facilitated by the fact that most of China’s hospitals are state-owned. Yet it would be wrong to assume that the central state is omnipotent with all the means at its disposal and discretion. Long gone are the days of a command economy and a redistributive society. The party-state remains powerful, but the state sector today only accounts for a small proportion of employment and is weak in many industries, including the IT industry.

As the rapidly worsening situation left the government—from central to local—with little time to react, there was much spontaneity among officials in their search for resources and solutions. For urgent tasks such as the building of makeshift hospitals, the government task force set up in Wuhan had to reach out to potential contractors across the country through informal networks and WeChat groups. Altruism was partially the motive of those who responded to the call.⁵

Knowing that help was on the way had been immensely assuring for Wuhan residents under the lockdown. Meanwhile, external help was matched by the tremendous efforts within Wuhan to win the fight against the virus. Government-led grass-roots organisations were the pillars on the ground to undertake frontline tasks, such as enforcing quarantine and lockdown, monitoring residents’ health status, sending patients to clinics and hospitals, and delivering food and other

⁵ See <https://news.sina.cn/sh/2020-02-24/detail-iimxyqvz5299899.d.html?from=wap>, accessed 6 April 2020.

supplies to the residents.⁶ Like hospitals in January and early February, grass-roots organisations were also overwhelmed by surging requests for help. They were able to re-group only when more resources—both manpower and goods—were deployed to the frontlines.

Importantly, resilience efforts also involve self-help, mutual help, volunteering and social responsibility from the people. Self-organised groups are an important part of social resilience. Many WeChat groups organised by residents themselves worked with either government-led grass-roots organisations or on their own to “bulk purchase” groceries and arrange deliveries.

Volunteers had played an important part as well, either to join the government-led effort or to fill in the void left by the government. Lockdown of the city had prevented many would-be volunteers from going to Wuhan. However, volunteerism was not absent. Volunteers were mostly Wuhan residents, but also included those from outside, such as truck drivers bringing food and medical supplies to Wuhan, construction workers mobilised to build the makeshift hospitals, or those who became volunteers after the lockdown forced them to stay in Wuhan.⁷ Online volunteering, such as online counselling, is a new form of volunteerism not hampered by the lockdown.

Truly impressive were the 11 million Wuhan residents who had endured up to TWO MONTHS of quarantine after the city was placed under lockdown, a move the World Health Organisation has described as “unprecedented in public health history”. The hardships Wuhan residents had gone through were extraordinary, so was the level of psychological and social resilience they had demonstrated. They understand that measures such as quarantine are necessary and that they play a part in fighting the virus by staying at home.

How Wuhan residents deal with psychological and emotional stresses is a question waiting for more research. The virus has left varying degrees of trauma, with some losing family members or close friends, many more infected, and the vast majority affected in one way or another. Wuhan is now entering the stage of recovery. Much has yet to be done, including providing counselling services, helping vulnerable families and groups, re-starting the economy and revitalising society.

⁶ In China, the grass-roots governance system involves semi-official residents’ committees and “grid management” teams. In recent years, Chinese cities have established an extensive system of grid management, with a grid typically covering an area of about 10,000 square metres with clear boundaries. A team of paid staff oversees a grid or a number of grids, spotting and reporting problems of either facilities (such as fire hydrants, power poles, telephone booths, guardrails, bus stops, traffic lights, road signs, street trees and trash/recycle bins) or events (that disrupt public order, affect city appearance and/or violate relevant regulations). The grid management system supplements the four-layered urban governance system, namely, the city, district, street and residents’ committee. While not wired for handling emergencies as large and challenging as the COVID-19 outbreak, the grass-roots governance system is the best available institution for managing and coordinating frontline tasks.

⁷ Reportedly, some drivers said that they volunteered to help the city regardless of whether they would be paid. See <https://www.businessinsider.sg/wuhan-coronavirus-what-life-like-inside-quarantined-city-china-2020-2>, accessed 30 March 2020.

Towards Epidemic/Pandemic Resilience

Wuhan's turnaround is remarkable. Countries hard hit by the second wave of COVID-19 outbreak are on the track to replicate Wuhan's trajectory given that they are the most industrialised and developed economies and that they have their own ways of mobilisation.

It would be difficult for smaller countries to make big mistakes and expect a quick turnaround, however. If their primate city falls, it is less likely that other cities can help revive it. The best strategy for them is to take pre-emptive and precautionary measures from the very beginning, moving ahead of the infection curve. This is what some East Asian governments have been doing.

It would also be difficult for large, densely populated countries with a weak public health system to replicate Wuhan's trajectory. An epidemic can be much more damaging in such societies. Unlike small countries, international help of any scale may be inadequate for large countries.

The 2020 pandemic is a wake-up call for the global society. There is a need for epidemic/pandemic resilience so that when the next outbreak occurs, countries worldwide are more vigilant and better prepared. A resilient system forms a national consensus quickly and take pre-emptive measures promptly.

To fight a pandemic, global efforts and consensus are needed in addition to national efforts within every single country. In view of the enormous damages inflicted by the coronavirus, resilience efforts should extend from *disaster resilience* to *epidemic/pandemic resilience* and from *national resilience* to *global resilience*.

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