

## Coronavirus Speaker Series:

### Sharing Knowledge to Respond with Resilience

#### Best practices and lessons from China's Coronavirus Response

Thursday, 12 March 00, 09:00am – 10:00am (Singapore Time)

**Welcome and introduction:** Lauren Sorkin, Acting Executive Director, GRCN and Francis Ghesquiere, Practice Manager in the Urban Development and Disaster Risk Management Practice of the World Bank

#### Discussion:

Dr. Yang Saini, Beijing Normal University's Academy of Disaster Reduction & Emergency Management, 'COVID-19 an Emergency Management Perspective.'

Dr. Aijun Qiu, Deputy Director General/Research Fellow, China Center for Urban Development, National Development and Reform Commission, "Responses in Chinese Cities"

#### Key takeaways:

##### Dr. Yang Saini

1. Emergency management context: Different institutions are tackling a different type of disaster, which can create barriers.
2. China has more than 80000 cases, but the situation is improving, and the rate of increase in new cases is falling
3. While average mortality is 3.9 %, it's higher in Hubei and lower in other provinces. The intensity of the cases in Hubei required a high need for medical support/resources, whereas other provinces were better able to manage their case load in January and February.
4. Five phases
  - a. Phase 1: No strict measures
  - b. Phase 2: Closure of the city
  - c. Phase 3: Strengthened measures. Bring other resources to assist Wuhan
  - d. Phase 4: All have access to hospital
  - e. Phase 5: New cases are decreasing. Situation is stabilized
5. Covid-19 is different than SARS; the duration is probably shorter than SARS with an estimation that the situation in China will be stabilized by the end of March. Except in Hubei Province, new cases in other regions are mainly from the international transmission (imported).
6. China has a strict quarantine program, but this creates economic losses. If the quarantine can be ended at the end of March, there will be huge economic loss reduction (compared to the case that quarantine ends in April).
7. Complex network features - how the virus spreads
  - a. Small world - Short average distance. Many people can come into contact with the affected patient. One factor which increases the intensity of contact is from transport network/infrastructure
  - b. Scale free - A small number of people that have more access. Wuhan is a transport node, a city of 15 million, and 5 million people left before restriction.
  - c. Aggregation - Population density

Covid-19 happened right before the Spring Festival when people have more parties and movements. Located in the center of China, Wuhan is a big city with 15 million population and a very high population density. All these factors contribute to the fast-spreading of the virus.

8. WHO has increased this into a pandemic, so hopefully, cities are getting ready.
9. Measures
  - a. **Identify the source of infection.** China was struggling in the beginning and Singapore did well. It's critical in the early stage.
  - b. **Control transmission.** This may not be suitable for other cities, but in Wuhan, quarantine plan and transportation restriction contributed to the disease stabilization. Popularize safe hygiene practice. Awareness is important as people may still gather anyway.
  - c. **Resource allocation.** In the beginning, China experienced huge deficits in resources and hospitals were crowded, leading to efforts to increase the number of available hospital beds (150,000 new beds). Other provinces also sent their medical teams to help Wuhan (40,000 professionals were deployed). Also, the

military (transport) and local businesses (skills and processes) were used to increase emergency logistics capacity.

- d. **Research and development.** Huge team working on the development of drugs and vaccines.
- e. **Vulnerable communities.** At an early stage, limited information about the diseases. The elderly were more affected, and up to 80% of infection may have happened in the hospital. Cities have a key role to play in identifying and protecting vulnerable communities.

### 10. Key learnings

- a. **Information should be clear.** In the beginning, information was not clear in Wuhan, and people were panicked. Everyone ran to the hospital, and this increases risks of transmission
- b. **Emergency logistics.** How to better organize the materials (integrate the official and unofficial). Utilize assets such as local companies.
- c. **Utilize the Civil Society Organizations.** As restrictions at the community level will burden community workers, higher demand to provide goods and access to everyday services. Coordination is crucial.
- d. **New technology.** The use of mobile tech for surveillance is possible yet; legal and capacity aspects remain an issue. Example: Use drones for temperature inspection and delivery, online medical services where people can contact doctors remotely.

### 11. New policies

- a. Quarantine is expensive, so categorized risk control has now been introduced.
- b. New policies
  - i. First is a scientific profession of control.
  - ii. Second is precise policy implementation.
  - iii. The third one is regionalization and classification.
- c. Daily update of the risks and different level of risk maps for deploying different measures

### 12. Transportation measure

- a. 1.15 billion to 0.33 billion drop in the use of public transportation in early days of virus control and after road closure - But this cannot be sustained.
- b. Potential improvements: staged transport restriction

#### **Dr. Aijun Qiu:**

As a resilience practitioner, my reflections on learnings from Chinese Cities' Coronavirus response is framed as the resilience qualities.

1. **City should be more resourceful to utilize its assets.** Cities should have resourceful features during an emergency. Besides constructed emergency hospitals, Wuhan "constructed" 16 "mobile cabin hospitals" using sport stadiums, exhibition centres, and factory building etc. Moreover, other provinces/cities' resources also were deployed to help Wuhan. For example, over 90 medical teams gave support in these "mobile cabin hospitals". Learning from Wuhan, cities should also have a good network with other cities to help each other in an emergency.
2. **City should be more integrated for governance.** City works better if they can make their strategic approach more integrated from districts to streets and to communities. Effective work in communities during the time of restriction in implementing government measures is most critical, which needs support from up-level government divisions and social society. For example, Shanghai has designated 16 areas for 16 different districts, even with different color clothes at the airport for "passengers" back from special foreign countries. And they use a "closed circle" approach to help and track those "passengers" mobility and connect with streets and community participation seamlessly.
3. **City should be more flexible for their action and measures.** Community adopts their measures according to the situations from informing residents to stay home to monitoring their temperature 3 times daily and to use a smart app to monitor with volunteers support. Gradually improve community working strategy by implementing smart city/different technology in fighting the virus.