SARS Experiences in China: Public Health Ethics Issues

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I will present

- a description of 2003/2004 SARS chronology in China and
- my observations on Public Health Ethics Issues during the SARS events with some reflections
A description of

- 2003/2004 SARS chronology in China
2003 Chronology

2002

- 11/16: 1st case of AP of unknown etiology, Fushan, China
- 12/17-22: 2 AP pt. transferred to Guangzhou from Heyuang. 7 HCWs: infected. Information: blocked
2003 Chronology

- **2003**
  - **1/2:** Population panic in Heyuang city. People rushed to buy herbal medicine, Heyuang reported 1st Cases
  - **1/3:** Heyuang Newspaper: Local CDC article: There is no epidemic in Heyuang…. cough, fever and other symptoms are caused by cold whether
  - Perhaps this is the first article on SARS in China’s media.
2003 Chronology

- 2003
  - 1/14: Provincial CDC was informed an AP outbreak in Zhongshan. Several pts quickly progressed to respiratory failure and die. Outbreak also among HCWs.
  - The early February, epidemic reached peak in Guangzhou.
2003 Chronology

2003

- 2/8: Cellular phone short text message circulated 40 m times X 3 days, Rumors: fetal flu, BT, etc. Epidemic news occurred in Hong Kong’s media
- 2/11: News Conference: 305 cases, 5 deaths since 11/16, 2002. The epidemic is under control
2003 Chronology

- 2003
  - 2/11 and 2/14: PROMED issued the global warnings
  - 2/18: Xinhua New Agency reported that Chinese CDC has discovered the cause of the disease: chlamydia
  - Guangdong disagreed: the cause is the virus
2003 Chronology

- **2003**
  - 2/21: A Dr. arrived HK, stayed in Metropol, room 911, passed the virus to 7 persons and consequently spread the virus around the world
  - 2/26: a Metropol guest carried the virus to Vietnam, infected 20 persons, including Dr. Urbani, died of the disease in Thailand on 3/29
2003 Chronology

- 2003
  - 3/1: Beijing had 1st SARS case from Shanxi, (infected in Guangzhou). SARS spread in the capital. The information was blocked again
  - 3/12: WHO issues a global SARS alert
2003 Chronology

- 2003
  - 3/26, GD released Feb. number: cases increased from 305 to 792, the death toll increased from 5 to 31
  - people begin to suspect the previous claim that the epidemic is under control
2003 Chronology

2003

- 4/3, Health Minister announced that the SARS spreading is under control. Beijing had 12 cases and 3 deaths

- A retired military doctor, a PUMC alumni, revealed the truth that Beijing’s epidemic is not under control
2003 Chronology

2003

- 4/20: 2 top gov officials were removed from their post.
- 4/25: Vice-Premier Wu Yi: Heath Minister
- Measures were taken to contain SARS spreading
- 5/23: WHO took GD and HK from its travel warning list.
- 6/24: WHO took Beijing from its travel warning list.
From 2003 Chronology …

Were China’s public health systems working?
2003 Chronology suggests...

- China did not have prepared public health systems
- The central command system: not working
- Information systems: not functioning
- Rapid diagnosis capacity: lacking
- Field epidemiologists: not prepared
- Pharmaceutical stockpile: not enough
- Hospitals and HCWs: not prepared
- Risk communication skills: poor
- There are several public health ethics issues
AS A Mirror…

SARS returns to test China again in 2004…
2004

- Guangdong: 1/5-31
  - 4 sporadic community-acquired cases
  - Quick response, complete control
  - ¾ cases were likely to be caused by Civet cat.

- Beijing/Anhui: 4/22-5/7
  - 9 cases, 2 clear transmission chains
  - Quick response, complete control
  - Lab contamination is the source of outbreak
Guangdong, 1/5-31

Acknowledgement to Dr. Luo Huiming of GD CDC for using the following 5 slides
Beijing: 2004/4/22-5/7

Be prepared,
Keep distance from AP

Sources: Beijing CDC
2004 Chronology (Beijing)

- 4/21, 5:00 PM: a suspected SARS case report received
- Isolation, Quarantine and field investigation began 40 minutes later
- 4/21 night, SARS lab network began to operate
2004 Chronology (Beijing)

- 4/22 evening, lab confirmed diagnosis
- 4/22, 7:00PM, MOH released epidemic info to public
- 4/22-23, three potential epidemic sites were closed
2004 Chronology (Beijing)

- 4/22, Ditan hospital: ready to take SARS pt.
- 4/23, Central command system began to work
- 4/24, 747 closed contacts were quarantined and completed 80% close contacts’ investigation
2004 Chronology (Beijing)

- 5/10, Quarantine of 719 close contacts ended
- 5/23, all quarantine ended, no more new case.
- 7/1: released investigation results to public: Cause of outbreak: lab contamination, CDC director resigned.
I will present

- a description of 2003/2004 SARS chronology in China and

- my observations on Public Health Ethics Issues during the SARS events with some reflections
## Comparison of 2003 and 2004 SARS in China

<table>
<thead>
<tr>
<th>Category</th>
<th>2003 SARS</th>
<th>2004 SARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public health system</td>
<td>Not working</td>
<td>Working</td>
</tr>
<tr>
<td>Central command system</td>
<td>Not functioning</td>
<td>Functioning</td>
</tr>
<tr>
<td>Information systems</td>
<td>Lacking</td>
<td>Working/improving</td>
</tr>
<tr>
<td>Rapid diagnosis capacity</td>
<td>Not prepared</td>
<td>Well prepared</td>
</tr>
<tr>
<td>Field epidemiologists</td>
<td>Not prepared</td>
<td>Prepared</td>
</tr>
<tr>
<td>Pharmaceutical stockpile</td>
<td>Not prepared</td>
<td>Prepared to treat</td>
</tr>
<tr>
<td>Hospitals and HCWs</td>
<td>Not prepared</td>
<td>Not prepared to alert and report</td>
</tr>
<tr>
<td>Risk communication skills</td>
<td>Poor</td>
<td>Good</td>
</tr>
<tr>
<td>Public health ethics</td>
<td>hardly considered</td>
<td>Partially addressed</td>
</tr>
</tbody>
</table>
My Observations/Reflections

- Trust and Transparency
- Experts’ scientific integrity and social responsibility
  - Atypical pneumonia
  - Medication and vaccine
  - Massive Civets Cat culling
  - Patients privacy protection
  - MDs obligation of reporting ID
Trust and Transparency (1)

- The need for transparency stems in part from the government’s ethical imperative to treat citizens with respect.
- Openness and accountability are important to public health governance.
- Transparency provides a feedback mechanism.
Trust and Transparency (2)

- Public health officials have the responsibility to involve the public in the process of formulating public health policies as well as to explain and justify any infringement on general moral considerations.
Trust and Transparency (3)

- Public health officials should honestly disclose relevant information to the public.
- Accordingly, citizens should have the right to request and receive information.
- Citizens’ input should be solicited.
China’s SARS experience tells us that controlling costs due to panic and disruption were magnified by an initial lack of public information, contributing to a large over-estimation by individuals of the perceived probabilities of infection and death.
Trust and Transparency (5)

- A key policy question for government is how to win the trust and confidence of the population, minimize panic and disruption and mobilize the public as a partner in combating SARS.
Let’s review China’s experience:
- During the early stage of SARS outbreak, information was blocked
- Local CDC article did not tell truth
- 120 m short text message circulated in 3 days
Trust and Transparency (7)

- Lead to public panic/societal crisis
- Guangdong and central Health Minister both did not tell truth
- Gov lost public trust, very difficult to mobilize public to participate in – situation lost control
Lessen learned: Transparency is essential to create and maintain public trust and accountability

Action 1: SARS information transparency after removal of two official on April 20, 2003

Quickly stabilized society, rumor disappeared
Trust and Transparency (9)

- Gov. regains the trust eventually
- Public participated in control activities by social distancing, personal hygiene, etc.
- SARS outbreak controlled
- Action 2: Timely disclose accurate outbreak information become a permanent part of the Infectious disease control and prevention law
Issues re: scientific integrity and social responsibility

- Atypical pneumonia
- Medication and vaccine
- Massive Civets Cat culling
- Pt. privacy protection
- MDs obligation to report ID
Atypical pneumonia

- Originally call “Unknown pneumonia”
- Then, for stability reason, rename: “Atypical pneumonia”
- WHO: SARS
- Still call “AP”, do we respect scientific integrity?
Medication and vaccine

- All of the following claims and actions were without any scientific evidence, misleading the public, raise the issue of scientist integrity and social responsibility again
  - Medication and vaccine were over-emphasized
  - TCM herbal, Immuglobin, antiviral medication
  - A professor claim to produce SARS vaccine in one month
  - “have quick(2 hours) SRAS diagnosis kits”
Patients privacy protection

- During SARS crisis, the first case name was published on media, reported in public meeting
- Even in the international conference, pt. names were fully reported
MDs obligation to report ID

☐ Active participation of MDs is essential to an effective response to outbreak

☐ MDs have unique skills/positions to identify and report first case of ID

☐ Early detection is critical in the ID prevention and control

☐ It is MDs roles and obligations to eraly detect and report ID
### 2004 SARS experience

<table>
<thead>
<tr>
<th>Case</th>
<th>Onset date</th>
<th>Suspect SARS date</th>
<th>Time interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Song X</td>
<td>3/25</td>
<td>4/20</td>
<td>27 days</td>
</tr>
<tr>
<td>Li X</td>
<td>4/5</td>
<td>4/22</td>
<td>12 days</td>
</tr>
<tr>
<td>Yang XX</td>
<td>4/17</td>
<td>4/22</td>
<td>6 days</td>
</tr>
</tbody>
</table>
Reflection

- SARS crisis has taught us a lot
- Public health ethics is new in China
- We are still learning
- We will be better
THANKS

Q & A