COVID-19 in China

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MBBS MHSM MTS FACS

SHENZHEN

March 25, 2020
To talk about

• Current situation in China

• What China has done in the past 3 months

• The key points

• Questions
<table>
<thead>
<tr>
<th>Patient from outside China</th>
<th>Current diagnosed</th>
<th>Current severe patient</th>
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<tbody>
<tr>
<td>5219</td>
<td>1573</td>
<td>427</td>
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<tr>
<td>现存确诊</td>
<td>现存重症</td>
<td>境外输入</td>
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<tr>
<td>昨日 +147</td>
<td>昨日 +458</td>
<td>昨日 +7</td>
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<table>
<thead>
<tr>
<th>Total diagnosed</th>
<th>Total discharged</th>
<th>Total death</th>
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<tbody>
<tr>
<td>81803</td>
<td>73301</td>
<td>3283</td>
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<tr>
<td>累计确诊</td>
<td>累计治愈</td>
<td>累计死亡</td>
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<tr>
<td>截止 2020.3.24 20:12</td>
<td>数据说明 ©</td>
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Map
The first three provinces

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<tr>
<th>省市</th>
<th>昨日新增</th>
<th>累计确诊</th>
<th>治愈</th>
<th>死亡</th>
<th>疫情</th>
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<tr>
<td>湖北 (Hubei)</td>
<td>1</td>
<td>(82.9%)</td>
<td>67801</td>
<td>60323</td>
<td>3160</td>
</tr>
<tr>
<td>广东 (Guangdong)</td>
<td>15</td>
<td>1428</td>
<td>1333</td>
<td>8</td>
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<tr>
<td>河南 (Henan)</td>
<td>0</td>
<td>1274</td>
<td>1250</td>
<td>22</td>
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Hubei Province

Current diagnosed

Discharged

Death

Date
Shenzhen

• 20 million population
• South China
• Next to Hong Kong
What China has done in the past 3 months

- Strong leadership from Central Government
- National level medical team set up
- “Strong confidence…”
- “To fight and win the epidemic…”
- 7 Main guidelines for fighting COVID-19
Main guideline for fighting COVID-19 (1)

- **Leadership**

  • The whole country to work as a whole
  • To consider local prevention and control demanding, and to consider how the local situation will affect other places and the whole country

  • To criticize those not doing things correctly, and to correct them immediately
  • For those doing the wrong thing or misconduct, to punish them according to laws and regulations
Main guideline for fighting COVID-19 (2)
- To strengthen prevention and control in main regions

• **Hubei** – Continue to strengthen overall prevention and control, to continue to prevent epidemic spreading to outside

• **Provinces around Hubei** – To press local governments to take the responsibility to set up prevention and control networks at community level

• **Beijing** – To improve prevention and control approaches, to focus on main group of population, to reduce moving sources of infection
Main guideline for fighting COVID-19 (3)

- To increase admission rate and cure rate
- To reduce infection rate and mortality

• To build dedicated hospitals ASAP
• To dispatch medical staff from all over China to support Wuhan & Hubei
• To work as a whole, to concentrate the best medical staff, to concentrate the severe patients, unified arrangement for medical treatment (Protocol)
• To propagate the effective treatment practice for severe patients
Main guideline for fighting COVID-19 (4) - *To increase science & research work*

- To demonstrate where the virus coming from scientifically
- To find out source of infection & route of transmission ASAP
- To strengthen research & development of vaccine and medication
- To open & share information and patient data that allowed to be released by law
- To encourage experts & scholars to take the responsibility & professional liability
Main guideline for fighting COVID-19 (5)

- To maintain society stability

- To maintain normal economy & society order
- To maintain medical treatment order
- To maintain society safety & stability
- To strengthen road and traffic management and control
- To reduce public transportation pressure and to prevent clustering of cross infection
Main guideline for fighting COVID-19 (6)
- *Publicity and education*

- To strengthen the confidence of to fight and win
- To increase the positive education
- To response to internal and international concern
- To tell the story about fighting COVID-19 in China and to collaborate with international partners
Main guideline for fighting COVID-19 (7)
- Economic stability

- With proper prevention and control work, support people return to work and production
- To restart the work of main projects
- To stabilize resident’s consumption
- To improve management capacity at national level
Leading organizations
Medical team at national level

Medical team leader –

Prof. ZHONG Nanshan

(钟南山教授)
Wuhan locked down

- 10:00 AM
- Jan 23, 2020

- To localize the infected patients
- Not to infect too many other people and other places
Wuhan locked down

• People saying sadly

• “A brave man to break his own arm…”

• “To sacrifice a city to save a country…”
A new hospital in Wuhan was built & finished within 8 days - 1000 beds (Late Jan.) (For severe patients)
Another new hospital in Wuhan was built & finished within 18 days - 1600 beds (Early Feb.) (For severe patients)
Big containers were used & hospital inside
Hospital inside – Examination machine & CT
Shenzhen (For severe patients) Beijing
Mobile cabin hospital (For mild symptoms/suspected patients)
Mobile cabin hospital (For mild symptoms/suspected patients)
Mobile cabin hospital (For mild symptoms/suspected patients)

- Total over 30,000 beds
- Significantly gather the patients together
- In order not to infect other people
Medical support from the whole country going to Wuhan & Hubei
Medical support from the whole country going to Wuhan & Hubei
Different support from the nation and overseas going to Wuhan & Hubei
In order to work inside ICU for a long period of time.
Medical staff from a province to help one city in Hubei
Medical treatment support inside ICU – Top medical teams from the nation

- Guangzhou
- Hangzhou
- Beijing
Two Handbooks & One Protocol
(Can get from Profs. Antonio & Michel)

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COVID-19 Diagnose & Treatment Protocol
7th Edition From National Health Commission in China

新型冠状病毒肺炎诊疗方案
(试行第七版)

2019年12月以来，湖北省武汉市出现的新型冠状病毒肺炎疫情，随着疫情的蔓延，我国其他地区及境外多个国家也相继发现了类似病例。该病被作为急性呼吸道传染病纳入《中华人民共和国传染病防治法》规定的乙类传染病，按甲类传染病管理。通过采取一系列预防控制和医疗救治措施，我国境内疫情上升的势头得到一定程度的遏制，大多数省份防控有效，但境外的案件数呈上升态势。随着对疾病临床表现、病理特征的深入理解和诊疗经验的积累，为进一步加强对该病的早诊早治，提高治愈率，降低病死率，最大可能避免医院感染，同时提醒注意境外输入性病例导致的传播和扩散，我们对《新型冠状病毒肺炎诊疗方案（试行第六版）》进行修订，形成了《新型冠状病毒肺炎诊疗方案（试行第七版）》。

一、病原学特点
新型冠状病毒属于β属的冠状病毒，有包膜，颗粒呈圆形或椭圆形，直径约60~140nm，其基因特征与SARS-CoV和MERS-CoV有明显区别。目前研究显示与蝙蝠SARS样冠状病毒（bat-SL-CoVZC45）同源性达86%以上。体外分离培养时，新型冠状病毒96个小时左右即可在人呼吸道上皮细胞内发现，而在Vero E6和Huh-7细胞系中分离培养需约6天。
Community level: If you don’t have your T checked
You can NOT go home
The Key Points: 4 Early

- Early detection
- Early report
- Early isolation
- Early treatment

- To move the control point at the front
- To increase the test capacity
- To stress the importance of community network management
- To find out every suspected/infected patient
- To stop or to slow the virus spread
The Key Points: 4 Concentration

- Concentrating patients
- Concentrating experts
- Concentrating resources
- Concentrating treatment

- Individualized treatment
- Trying to help every patient

- Putting the most severe patients in the best resources hospitals
- Multidisciplinary team approach
- Support from the best medical teams in China
- To reduce mortality
Summary

• Strong Leadership from Central Government
• The whole country to work as a whole
• To fight the virus first
• Trying to provide support for every person and every family
• To protect medical staff
• To control the situation
• And then, to recover the economy
Recommendation – Adopting the principles

• “The experiences from China is not the ONLY way, but the principles are the SAME…” (Prof. Zhong NS)

• Press conference in Guangzhou

• March 18, 2020
## Principles – 4 Early & 4 Concentration

### 4 Early
- Early detection
- Early report
- Early isolation
- Early treatment

### 4 Concentration
- Concentrating patients
- Concentrating experts
- Concentrating resources
- Concentrating treatment

### Experiences from China
Recommendation – The End

- Every country is not the same
- Cannot use the same way
- The most important things are the PRINCIPLES
- Fully understand the principles used in China
- To do it in a way suitable in your own country

Thank you