香港公共醫療醫生協會

Hong Kong Public Doctors' Association

Opinions on the handling of Severe Acute Respiratory Syndrome

Was the initial outbreak in PWH preventable?

1) Before the outbreak in PWH, it was known that

   a) There was an outbreak of Atypical Pneumonia in GuangDong. According to the official information, it was caused by Chlamydia, ~300 people affected and 5 died.

   b) Two cases of suspected H5N1 infection were reported, probably originated from Fujian.

   c) A few cases of severe pneumonia were admitted to KWH and PYNEH, and some HCW were also affected.

2) In response to a headline report in a newspaper, Department of Health released a press statement on 11 February, mentioned that " ... the department has already contacted Mainland health officials to get more information."

3) A memo dated 19 February 2003 was sent from a PWH microbiologist to all Department Heads (Appendix 1). It was mentioned,
   "HAHO has this evening reported that a nine year old boy has been reported to have influenza A H5N1 and is currently in a stable condition in PMH. The boy's sister and father are reported to have died of pneumonia. The family had recently returned from a trip to Fujian Province. From a diagnostic and infection control standpoint I would suggest;

   a) All cases of suspected / proven influenza A and severe community acquired pneumonia cases should be nursed with droplet precautions.

   b) Cases of severe community acquired pneumonia requiring ICU admission or assisted ventilation should be notified to HAHO as requested. I would request that these cases are also notified to your hospital's infection control unit. ..."

4) It can be assumed, at that time, that the "Atypical pneumonia" was believed to be caused by Chlamydia (or H5N1, or another mutant virus, or a new virus) and that "droplet precaution" was adequate to control its spread.

5) The outbreak in PWH occurred on early March. It was retrospectively found that, the use of nebuliser by an infected (unidentified on that moment) patient led to the extensive spread of infection, by a mode similar to aerosol spread.

As a matter of fact

1) Hong Kong failed to get accurate and detailed information from GuangDong.

2) The memo (Appendix 1) has not drawn the attention of the majority of HCW.

3) "Droplet precaution" alone might not prevent the outbreak in PWH, as the role of the nebuliser (or other devices leading to aerosolization) in modifying the mode of spread was not known on that occasion.

4) **However, after the PWH outbreak, with (i) the large number of patients and staffs affected and (ii) the mystery on the mode of spread, it should raise concern that the virus could spread as aerosol in some uncertain situations.**

Should PWH be "closed" ("quarantined")

1) By 16 March 2003,

   a) PWH reported that 36 staffs, 15 medical students and 37 patients from the community (some of them were ex-8A patients, visitors and patient contacts) were admitted with the diagnosis of "Atypical pneumonia". Of which, 3 staffs, 1 medical student and 7 patients from the community already required ICU care.

   b) However, the press release from HAHO on the same date only reported that PWH admitted 36 staffs with "Atypical pneumonia" (and some admitted to other hospitals). **Did the discrepancy reflect the attempt of the some "authority" to play down the outbreak?**

   c) The Authority had explained that there was no increase in the number of "background" atypical pneumonia in the period and that "case definition" was unclear. **Would these explanations too risky when a new fatal infectious disease was probable.**

2) From 14 March 2003 onwards, there were strong voice from PWH colleagues to "close" (what they meant was to "quarantine") PWH because

   a) Large number of colleagues and patients were infected within a short period, which indicated that the causative agent was extremely infectious.

   b) More than 10% of them were critically ill and required ICU care; many of them were young and fit, which indicated the seriousness of the disease.

   c) The causing agent could not be identified and most known microbiological agents were ruled out. This was a sinister sign, because there was no way to predict the behaviour of the agent, and that no effective treatment was available.

According the above information, extensive community outbreak with high mortality was a real threat. How could community outbreak be prevented? Why were stringent quarantine measures withheld?

3) In a PWH forum on 17 March 2003 evening, the CCE of NT East Cluster, Dr, Fung Hong, reported that the request to "close" (quarantine) PWH was reflected to the HAHO but it was turned down. What were the rationales behind?

4) On 18 March 2003, Dr. KL Leung approached Professor Sydney Chung for the progress of contact tracing. Dr. Leung reiterated that contact tracing was vitally important and PDA was happy to help if manpower was inadequate. Professor Chung said that it might be disrespectful to the Department of Health by taking up their job but he promised to check the progress. On 19 March 2003, Professor Chung replied that Department of Health had not done much and he decided to call back all CUHK research staff (which he had evacuated them from the PWH on 17 March) to start the contact tracing. **When did the Department of Health start contact tracing?**

Infection Control Measures

Infection Control Measures mean much more than a mask. They should include:

1) Clear policy and guidelines

2) Communication with various levels of administrators for implementation

3) Categorization of different areas of a hospital according to risk.

4) Ventilation system

5) Adequate supply of personal protective equipment including mask (with fit-testing as indicated), glove, work clothes, gown, face shield or goggle, and cap.

6) Identification of high-risk procedures with additional protection and precautions (e.g. viral filter, air-mate).

7) Adequate facilities and areas for gowning / de-gowning, hand-washing and bathing

8) Staff training

9) Adequate manpower and appropriate expertise

10) Isolation, or at least "better spacing", of patients

11) Audit and feedback mechanism

At this moment, HAHO probably has identified problems in all the above areas during the SARS epidemics and has implemented or going to implement remedial measures. However **some bitter experience** should be recalled

1) On late March, when PWH learnt a lot and was recovering from the SARS outbreak, some other hospitals were still not alerted of the seriousness of the epidemics. When Dr. Tse Yuen Man and Mr. Lau Wing Kai were helping the resuscitation of a SARS patient, from whom they contracted the disease, the Hospital had not yet implemented proper infection control measures: No fit-test for their N95 mask, no work clothes, no additional protection and precautions for high risk procedures, no facilities for de-contamination.

2) Similarly in UCH, medical admission ward was not categorized as high-risk area. Staffs were not provided with proper PPE. Two health care workers subsequently died of the disease.

3) In early April, a patient with known history of close contact with SARS was allowed to stay in Tai Po Hospital. At the moment the Hospital was not yet ready to take care of "cohort patients". Unfortunately the patient had contracted the disease, and he transmitted it to Dr. Kate Cheng.