

# A Decade Later, We Remember

By Denise Yuen



Observing a minute of silence in honour of the victims of the SARS epidemic

A minute's silence was observed at the SMA SARS 10th Anniversary Symposium for the victims of the global SARS epidemic in 2003. Worldwide, over 8,000 people had been infected and close to 800 died, while in Singapore, 238 had been infected and 33 died, including five healthcare workers. The five were Dr Alexandre Chao, a consultant at Singapore General Hospital (SGH); Mdm Hamidah Bte Ismail, a nursing officer at Tan Tock Seng Hospital (TTSH); Mr Jonnel Pabuyon Pinera, a nursing aide at Orange Valley Nursing Home; Dr Ong Hok Su, a medical officer at TTSH; and Mdm Tan Kiew Miyaw, a health attendant at SGH.

Minister for Health Mr Gan Kim Yong was the Guest of Honour at the symposium, held at the College of Medicine Building on 31 May 2013. This date is especially significant as it was the date which the World Health Organization (WHO) had declared Singapore SARS-free ten years prior. More than 300 healthcare workers, comprising mainly doctors and nurses, attended the event. All participants were given goodie bags which included last month's edition of *SMA News*, a special commemorative issue on SARS (see <http://goo.gl/eFvec>).

In his welcome address, SMA President A/Prof Chin Jing Jih explained the reasons why SMA organised this event. In addition to remembering the sacrifices and

suffering of healthcare workers (HCWs) and patients during the SARS outbreak, he felt that it was good to revisit the valuable lessons learnt then. He also noted that the speakers had served with distinction in the outbreak in their respective roles, which would allow the audience to learn much from the insights they would be sharing.

## Lessons from SARS

Prof Tan Chorh Chuan, President and Vice Chancellor, National University of Singapore, delivered the keynote lecture, *Lessons We Have Learnt and Lessons We Have Yet to Learn from the 2003 SARS Outbreak*.

Prof Tan noted that at first, the Ministry of Health (MOH) knew little about the virus, but quickly learnt three key lessons about it: intrahospital transmission was the main amplifier of SARS infections, superspreading events were key in outbreak propagation, and there were atypical clinical presentations of SARS. These affected how MOH handled the epidemic via a "prevent, isolate and contain" strategy (including quarantining affected individuals) and a "wide-net" approach (including contact tracing), which were successful.

Prof Tan highlighted the lessons that SARS taught us. Stringent infection control in healthcare facilities is

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critical, and we need to be well prepared for epidemics via various measures. SARS also emphasised the importance of effective communications and timely, credible information. Epidemics can spread beyond borders and cause massive economic and social damage, so international health regulations, greater global cooperation, and improvements in vaccine production capabilities and capacities are essential.

He also pointed out lessons that we have not learnt from SARS. As 75% of recently emerging infectious diseases (EIDs) are zoonotic, we need to improve animal husbandry practices. We also need to learn how to better assess potential severity of new epidemics and better tailor containment measures. A final lesson partially learnt is: although there is increasing interest from international community in global early warning and response systems for new pandemics, many countries lack core capacities to detect and report potential health threats and cannot complete their infrastructure obligations according to WHO guidelines.

### Dealing with future epidemics

The first plenary lecture, Hospital Operations Post-SARS, Are We Ready for the Next Communicable Disease Outbreak?, was presented by A/Prof Lim Poh Lian, Head and Senior Consultant, Department of Infectious Disease, TTSH.

A/Prof Lim noted that hospitals are a critical part of outbreak management, and the roles they have to fulfill include: diagnosis, treatment, isolation, infection control, and data communications. Each role has its own set of challenges, such as rapid triage and postdischarge home quarantine, in the isolation of affected individuals. Failure to meet these challenges will often result in outbreak amplification, as demonstrated in the SARS epidemic in Singapore.

To prepare for future epidemics, A/Prof Lim recommended that outbreak protocols must be prepared beforehand, and that templates should be flexible. Rapid response teams must be trained, and tabletop exercises and postexercise reviews should be held. She concluded that our level of preparedness would be put to the test when the next epidemic strikes.

### New threats on the horizon

The last plenary lecture, Update on Influenza A (H7N9) and Middle East Respiratory Syndrome (MERS-CoV), was presented by Dr Jeffery Cutter, Director, Communicable Diseases Division, Ministry of Health. He discussed the various aspects of the spread of these two new emergent viruses, including case summaries, clinical manifestations, risk assessment and virology.

Dr Cutter noted that as of 29 May 2013, a total of 133 H7N9 cases (including 37 deaths) had been reported from ten provinces of China and Taiwan. The virus is of avian origin, but there were genetic markers suggestive of adaptive changes favouring mammalian or human infection. Infected birds, especially poultry, and the contaminated environment were the most likely sources of infection. While almost all cases had been sporadic, a few family clusters had been identified, but there was insufficient evidence to conclude that human-to-human transmission had arisen.

As for MERS-CoV, Dr Cutter indicated that as of 29 May 2013, a total of 49 cases (including 24 deaths) had been reported from countries like Saudi Arabia, France and the UK. The virus had a putative bat origin, but the infection source is unknown so far. Most cases had occurred sporadically, but limited human-to-human transmission had been reported in a family cluster in the UK, and a hospital cluster in France. While there was no evidence of sustained human-to-human transmission, there was a possibility of importation of cases with some transmission in the UK and France, and this might lead to a SARS-like epidemic in more than one country.

### Closing thoughts

Dr Wong Chiang Yin, Chairman of the SMA SARS 10th Anniversary Committee, concluded the event with a short speech. He hoped that this event would provide the audience with closure to the SARS epidemic and renew their commitment as HCWs, but also felt that "we cannot and should not live in the past forever, but we do need to remember the past to strengthen the future". He also exhorted them to retain their spirit of unity, dedication and sacrifice, so that they can always prevail over such outbreaks. **SMA**

Prof Tan Chorh Chuan



A/Prof Lim Poh Lian



Dr Jeffery Cutter

