

Dealing with Something Novel

Dr Tan Ban Hock was working at Singapore General Hospital (SGH) when it was hit by an outbreak of SARS in early April 2003. Dr Tan, who currently heads SGH's Department of Infectious Disease, shares his thoughts about that trying time, and the improvements made since then.

SMA: When SARS first hit Singapore, what were your thoughts then?

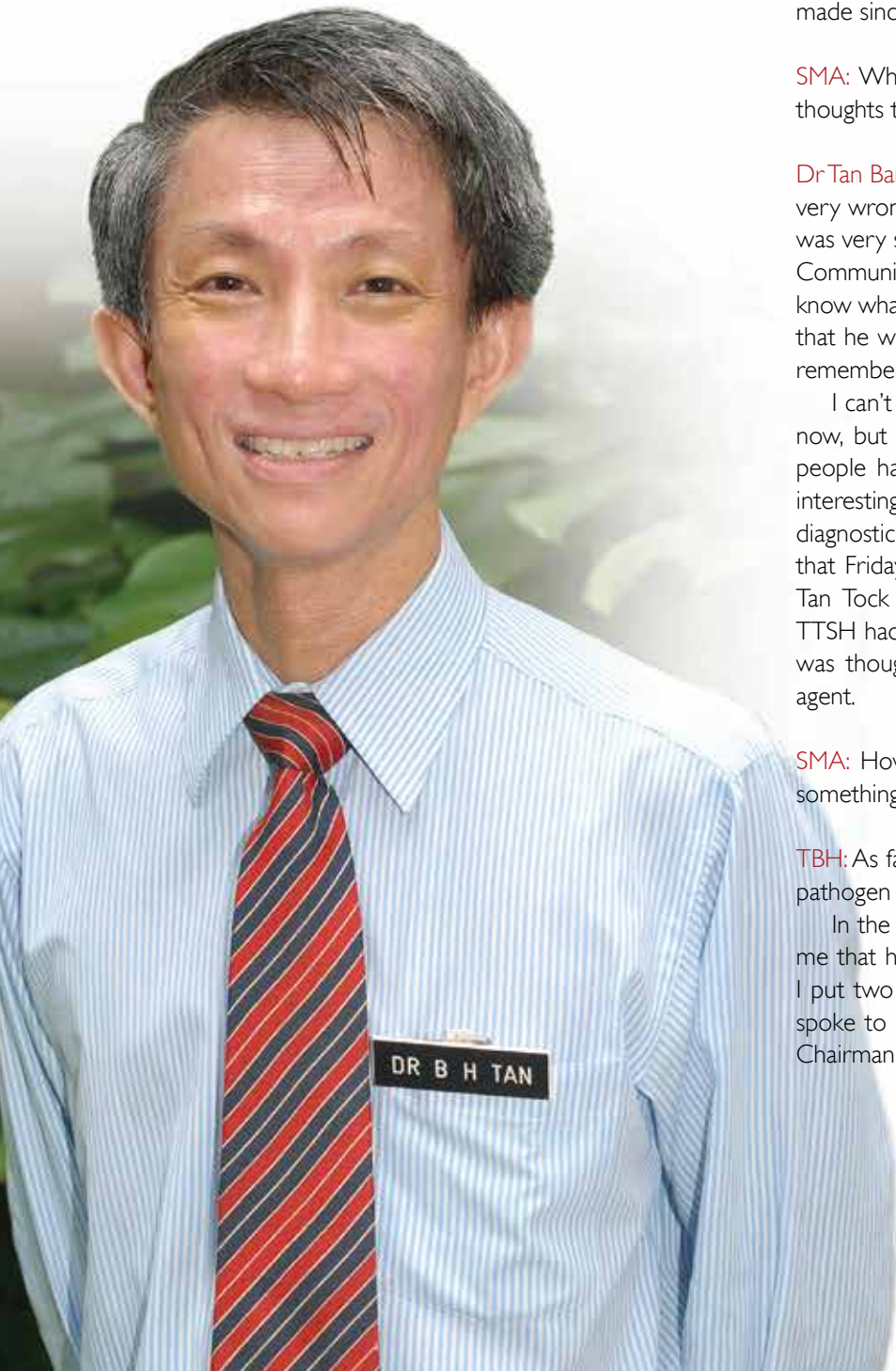
Dr Tan Ban Hock – TBH: I sensed that something was very very wrong. I heard that my registrar Dr Leong Hoe Nam was very sick. It didn't click at first because he was doing a Communicable Disease Centre (CDC) posting, so I didn't know what he had been up to in great detail. When I heard that he was developing fever and respiratory symptoms, I remember calling Dr Brenda Ang.

I can't remember the exact sequence of events clearly now, but I remember it was a Friday. Infectious disease people have a grand round on Fridays, where we share interesting cases and sometimes challenge each other with diagnostic problems, but I didn't attend the grand round that Friday. I remember my colleagues coming back from Tan Tock Seng Hospital (TTSH) very excited, because TTSH had presented three cases of a new syndrome that was thought to have been caused by a novel infectious agent.

SMA: How did they know that they were dealing with something novel then?

TBH: As far as they could tell, all the available virology and pathogen tests were negative.

In the early hours of the next morning, Hoe Nam told me that he was unwell. He called me from Frankfurt, and I put two and two together. That was the Saturday that I spoke to Brenda Ang and told Prof Tay Boon Keng (then Chairman, Medical Board of SGH) about it.



I think at that point, there was a big scramble to try our best to understand what was happening and to do things right in SGH.

SMA: There was no knowledge whether this was a paramyxovirus, chlamydia or influenza?

TBH: There was no knowledge of the type of pathogen. There was no knowledge on how to handle something like that. Nowadays, when you receive news of a novel coronavirus or bird flu, it is very different. Everybody understands what is happening and everyone knows what could happen if you don't act. Everyone knows what to do now. But at that time, no one understood what was happening.

Technology probably has a lot to do with how things have improved today.

I remember some of the very senior CDC staff wondering what sort of instructions the Ministry of Health was going to give. In the beginning, it was not clear whether we had to wear N95 masks, and so on. The situation is very different nowadays. The standard operating procedure is there, the rationale for taking certain actions, even if they sound extreme, has all been worked out. The authorities and healthcare management react much faster and they alert people rapidly. I have a friend in New York who sends me anything she gets from the New York State Department of Health. In fact, I put myself on their mailing list. It's amazing how fast authorities react now and give instructions, and also how people are now more likely to err on the side of caution.

SMA: When the first fatality happened in Singapore, and of course the first case in SGH, what was going through your mind?

TBH: What went through my mind was that we must do our best to stop it, somehow. We didn't have many SARS patients, but we had a few very bad ones and they were enough to keep us occupied.

SMA: What was the thinking then about the super-spreader?

TBH: I think from a strictly academic perspective, it was both interesting and frustrating because we were seeing things evolving in front of our eyes. It was very frustrating because every time there was a case and a supposed contact, there wasn't enough discussion about that contact. From the viewpoint of a clinician who wanted to make sure that the staff wouldn't come down with the SARS virus, basically you had to be very harsh and insist on full protective gear, and so on.

SMA: What did SARS teach you?

TBH: Many things. From an infection control viewpoint, behaviour is everything.

You can say, "I'm not going to don any gown or mask when I go into this fellow's room, because he asked me to pass him a glass of water, that's all", and you think that you're not going to touch the patient but after handing the flask to him, he asks for a urinal and then says he's cold, so you end up passing him a urinal and moving his blankets for him, so in the end you do more touching than just giving him a flask. Those might well be serious events. It has been shown, for example, that small things like switching on the light, patting an arm, can transmit vancomycin-resistant enterococci!

On paper, it's nice to give people a lot of leeway for independent judgement, but it may end up being dangerous for the healthcare workers and patients. There are too many variables.

SMA: Are there any other lessons you think we have learnt?

“From an infection control viewpoint, behaviour is everything.”

TBH: How to respond to emerging pathogens. We have a whole system going now, for example, the campus disease outbreak committee, and like I said, health authorities all around the world are sending warnings to people on their mailing list. The hardware has been put in place to handle another big event.

One of the most useful things is that the language spoken by infectious disease professionals is now easily understood by many people and administrators, even members of the public. When you tell relatives, for example, that you want to isolate the patient, they would understand. Some may like it, some won't like it, but at least people know what it is all about.

SMA: Was there a sense of fear when you were in the hot zone in SGH during SARS?

TBH: If I did, it didn't seize me because I just did what I was supposed to do. **SMA**