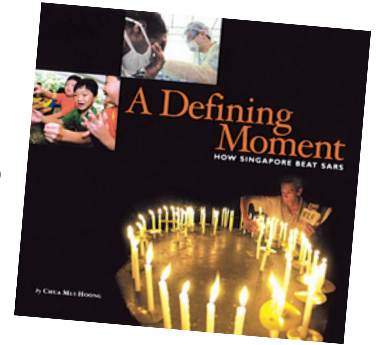
A Defining Moment – How Singapore Beat SARS

By The Hobbit



OFF TO A GOOD START

Make no mistake, Ms Chua Mui Hoong has written a very readable book about the 2003 SARS outbreak in Singapore. The book starts off with a moving tale of Patient Number 1. Indeed, the patient's response to her personal tragedy of "Job-ian" proportions can be described almost as an account of Christian apologetics put into practice.

Ms Chua rarely misses the mark in the several personal accounts of human tragedies: Patient Nah Wee Tuan and the filial stoicism of son Dr Gerard Nah; the unbridled grief and anger of Mr Rao, who lost his wife Madam Hima Bindu to SARS in the National University Hospital (NUH); and the triumphant joy of survivor Mrs Gladys Lim.

But, because the author had unfettered access to officials and official records, one would like to expect a little more than an account of what had happened. Perhaps an insight into the decisions made and why mistakes were made, would have given the book more depth. After all, being commissioned by the Ministry of Information, Communication and the Arts, and published by the Institute of Policy Studies, the book will serve as the de facto official account in years to come – not just what happened, but why certain things happened. Here are some questions that could have been answered by the author.

UNANSWERED QUESTIONS

Why the flip-flop?

The book mentions no less than four times of the decision for other hospitals to accept former patients of Tan Tock Seng Hospital (TTSH). It rightly says the decision was a bad one (pages 63, 64, 188 and 189).

In fact, a flip-flop in decision-making was clearly described in the account on page 64. The first instincts of the Ministry of Health (MOH) were correct, but it then changed its mind. This is highly unusual because clearly, MOH does not usually change its mind, and the new decrees also amounted to what was clearly (no need for perfect hindsight here, just a basic understanding of epidemiology in foresight will do) "epidemiological suicide". In addition, MOH clearly went against the prior advice of some hospital administrators to effect this U-turn, which was to have dire consequences for the whole country. We do not need to reveal who is to blame, because this is not a blaming exercise, but clearly it would have been very good if the author could enunciate the factors that led to this decision, so that we can learn from this and not repeat the same mistake. Surely this could be done, since the author had access to all the records and minutes of the MOH SARS Task Force?

Did SGH screw up and why?

The Singapore General Hospital (SGH) had been blamed for letting SARS slip beyond TTSH. It should take responsibility for "complacency". However, one needs to ask: Are we deontologists or consequentialists when we label an organisation a failure? Should SGH be blamed because SARS blew up there, or should SGH be blamed because it had lower standards of infection control and isolation than other public non-SARS hospitals, for example, NUH, Changi General Hospital (CGH) and Alexandra Hospital (AH), excluding the reinforced TTSH? Mr Rao's account of NUH on page 51 reveals that SGH may not be alone in this.

Interestingly, TTSH even had its Annual Dinner and Dance as scheduled on 14 March 2003, after the World Health Organisation (WHO) issued a global alert, and after TTSH had alerted MOH of a rare infection not responding to antibiotics.

Did SGH appear to be more lax than other non-SARS public hospitals? If yes, then it certainly screwed up. But the book did not throw much light on this other than pass summary judgment of complacency.

A more convincing case where SGH probably could have done more would have been the management of the late Dr Alex Chao. His symptoms were atypical. Even so, he did quarantine himself at home away from his family. Wouldn't this have been reason enough to send him to TTSH at least for an assessment? It was not so much that Dr Chao was denied treatment by TTSH that SGH was found wanting, but that he was denied even an assessment by TTSH infectious disease specialists.

Contact tracing

The question of contact tracing for the patient that spread SARS to the wholesale market was another intriguing one. He was the brother of the index case of the SGH cluster. He was not quarantined nor contact traced until he was admitted into NUH, and later in TTSH. By then, it was too late. The question put forth was why he was not found out earlier. The answer is really simple – visitors to hospitals were never recorded till then. Similarly, visitors are not recorded now. If SARS ever reappears in Singapore first before it does in other countries, it may well be the same story again.

Why TTSH? Will it be always be TTSH?

Perhaps the most important question to be asked is: "Will it always be TTSH? Will TTSH always be "infectious disease X-

Page 23 ►

◀ *Page 22 – A Defining Moment – How Singapore Beat SARS*

Central"? Medically speaking, a hospital is closed in an infectious disease outbreak to treat infected patients for two reasons:

a) The hospital has the most appropriate expertise and it is good to limit the risk of transmission to that facility; and
b) The hospital is totally overwhelmed by infections and one can no longer stratify epidemiological risk within the hospital or perform critical functions such as A&E and ICU.

The book makes no mention as to why TTSH became SARS-Central. In a future scenario, an outbreak can occur in another hospital such as NUH or SGH to the point that it must be closed. What would happen then? Would we still designate TTSH as the Infectious Disease Central and totally close two hospitals at the same time? Would the remaining hospitals, in particular A&E departments, be able to cope?

CRITICAL GAPS IN THE BOOK

Those that contended with the BIG UNKNOWN

In terms of comprehensiveness too, the book falls short on some accounts. It goes on at length about what happened at SARS Ground Zero – TTSH, but it practically missed out most of what other healthcare workers went through in the private sector. There was no account of how our private hospitals coped.

More importantly, the GPs who had to face hundreds of patients with fever day-in and day-out, were given scant attention. This is perhaps the greatest shortcoming of the book. I think all of us who lived through SARS seeing patients, realised that the stress and courage involved in treating patients with fever (that is, "unknown" or "possible" SARS) were no less than treating the known-SARS patient. MOH practically did nothing until the then Minister of State for Health, Dr Balaji Sadasivan met GPs in the College of Medicine Building's Auditorium to reassure them.

N95 mask shortage

Other than a brief account in the section on SGH, there are no detailed accounts of what hospitals and healthcare workers suffered as a result of the shortage of N95 and other personal protective equipment. This was a crucial link in the story because if every hospital had enough of such equipment to pass around, then there was no need to risk-stratify the staff and have different levels of equipment for staff with different levels of risk. The chance of infection spreading beyond TTSH would also have likely decreased. What was really the mask supply situation in March and early April in the hospitals? Fortunately, support for GPs came early in the form of N95 masks sold by the Singapore Medical Association (SMA).

Courage Fund and other people-sector initiatives

The famous Courage Fund was originally started by a couple of young medical officers. It was then adopted by the SMA and Singapore Nurses Association, before it was taken over by the National Health Group (NHG) and Singapore Health Services (Singhealth) and renamed as The Courage Fund. This great initiative by little people was completely ignored by the author – another regrettable omission.

Role of clusters

The role of the clusters, NHG and SingHealth, in the outbreak was not very clearly described in the book. Besides giving moral and some logistical support, what were its operational roles during the outbreak? Having read the book, one is none the wiser.

THE REST OF THE BOOK

Research

The chapter on research was well-written but perhaps a bit too self-congratulatory. Singapore really lost out to Hong Kong in the research paper business during the SARS outbreak. Most of the landmark papers published in premier medical journals such as *New England Journal of Medicine* and *Lancet* came from Hong Kong, although outbreaks occurred in both places at about the same time. Neither did we come up first in the viral genome race or test kit race. Interestingly, the first test kit came from Germany using material obtained from Singaporeans who were warded there!

Chapter 5 – Post-Infection Control Measures

What we did come in tops was our innovation in post-infection control measures. Measures such as infra-red scanners and home quarantine surveillance cameras were indeed world firsts. The chapter on these measures was justifiably laudatory.

Chapters 4 and 6 – The Softer Aspects

Fear was indeed a big picture. One could not fault Chapter 4 on the expanse of its coverage. The important efforts of hidden heroes, such as prison inmates washing linens, were also nice touches by the author.

SUMMING IT UP – HOW SINGAPORE BEAT SARS

The last chapter of the book is perhaps the most important one. It tries to pass judgment and grade Singapore. There are no startling revelations and epiphanies. There is more optimism than sobriety: we came in second after Vietnam, which is not bad. Unfortunately, demographics and local conditions were not taken into account in this pronouncement. The fact is: Vietnam and China are both big countries with significant numbers of people travelling between the cities and the countryside. That they could control the outbreak in the first place was remarkable. Even Taiwan and Toronto had more difficult issues to contend with, geographically and demographically. The only close comparison to Singapore was really Hong Kong. As such, there was really no need to compare and proclaim an irrelevant second place.

Then again, it is hardly surprising that the book ended as such. It is a very readable book, but because it consistently tries too hard to be too correct, greatness sadly eludes it. ■

Note:

All views and observations expressed in this article are those of the author's alone and do not represent those of the Editorial Board or Singapore Medical Association.