



Stories of SARS

What are your most unforgettable memories of SARS? SMA News posed this question to healthcare workers, who replied with a whole gamut of answers. Their different stories intertwine to form a poignant chapter on the battle against SARS and how it was won.

I will never forget how one doctor's astute decision caused the shutdown of the entire Pasir Panjang Wholesale Market for three weeks.

On that fateful day, I thought it was going to be like any other SARS working day. A middle-aged gentleman with fever, cough of three days' duration and a viral count, plus a pneumonic patch on the chest X-ray. He had no contact history and no travel history.

But the sharp clinician, who was the hospital's infectious disease expert, said, "What did you say this patient works as?"

I dutifully replied, "Dr Oh, he sells vegetables in Pasir Panjang Wholesale Market."

"Oh, you had better get this patient into an isolation ward," she replied.

He was subsequently transferred to the "probable SARS" ward in Tan Tock Seng Hospital (TTSH) and within 24 hours of the positive coronavirus polymerase chain reaction (PCR) result, the entire market was shut down for 21 days.

How did she know? How could she have guessed? I can only conclude that decision making is not for the faint-hearted nor for mere mortals like me.

**Dr Lee Shu Woan,
Consultant, A&E, Changi General Hospital**

I will never forget 22 March 2003. It was in the afternoon when I was informed of an urgent Ministry of Health (MOH) meeting – MOH was declaring a concerted fight against SARS immediately. KK Women's and Children's Hospital (KKH) was mandated to run the paediatric facilities at the designated SARS hospital, TTSH. In true KKH "can-do" spirit, both the medical and nursing teams worked tirelessly through day and night, and got Ward 13A operationally ready to receive children requiring general and intensive care unit (ICU) care within 24 hours.

**Prof Chay Oh Moh,
Senior Consultant, Respiratory Medicine Service,
Department of Paediatrics, KKH**

**Photos: National University Hospital
and iStockphoto**

KKH nursed over 60 children admitted for suspected or probable SARS then. Like other countries, most of the children with SARS were not very ill, but it was challenging looking after them as they were confined to their rooms at all times. Only one caregiver could stay with the child, and they were not allowed any visitors. Fortunately, there was a television in each room but staff had to call for resources such as colouring pencils to keep these children occupied. The parents and the KKH staff found that keeping the kids engaged and entertained required us all to be resourceful and imaginative. I was also admitted as a patient at TTSH and found the almost complete social isolation difficult. Thankfully, friends, relatives and colleagues took the time and effort to call regularly, much appreciated!

Dr Janil Puthuchear,
Head and Senior Consultant,
Department of Paediatric Subspecialties, KKH

Despite having evidence to prove the effectiveness of personal protective equipment (PPE), the unspoken psychological fear of contracting SARS accidentally was quite real, leading to initial social isolation from family and friends for many of us then. The positivity and camaraderie of the KKH paediatric medical and nursing team spurred us on.

Dr Teoh Oon Hoe,
Head and Consultant, Respiratory Medicine Service,
Department of Paediatrics, KKH

When we were being tasked as the advance party to set up a paediatric facility at TTSH, we didn't think too much of it and just went there. When we were there, we started to hear about staff falling sick and a few even dying. That's when we realised the seriousness of this national crisis. We continued with our work but we took extra precautions to isolate ourselves. I took special precaution, especially at home because I had grandnieces and loved ones, so I

stayed in my room all the time and never came out. If I had to, I would wear a mask.

Ms Nadeson Vannaja,
Assistant Director of Nursing,
Division of Nursing, KKH

A lot of paediatric patients did not have their parents or guardians with them. Besides nursing them back to health, we also had to entertain them and comfort them. I remember one set of siblings whose family was quarantined and we were the only caregivers for them. They truly appreciated our care during that period.

Ms Annie Goh,
Assistant Director of Nursing,
Division of Nursing, KKH

I was one of those who volunteered to be stationed at the Obstetrics facility that KKH set up at TTSH during SARS. I made this decision after discussing with my husband and two young children aged nine and 11. Death was not on my mind as it is something decreed by God. Everything is predestined and I was not going to let my fear stop me from volunteering. I am glad that I volunteered because I know I had made a difference. I remember comforting a paediatric patient by stroking his hair as his mother was admitted in the ICU at TTSH. When I turned back, I saw his grandfather crying. Apparently, his daughter used to stroke her son's hair before he sleeps.

Ms Zainon Binte Ahmad Hariri,
Nurse Manager, KKH

I remember when we were at TTSH, we would wait anxiously for the daily SARS updates from our KKH colleagues. News of deaths would leave us very saddened. Although we were worried for our safety at times, we felt sadder for those who had succumbed to SARS, especially our healthcare comrades who had given up their lives to save others.

Ms Sim Boon Eng,
Senior Nurse Clinician, KKH

I volunteered to staff the paediatric centre at TTSH that was set up during that period. The centre saw about five suspected SARS patients every day. We had to wear PPE while doing ward rounds – the gown, the mask, the shield, everything. It was pretty suffocating, but in the end, we got used to it and carried out our duties. I remember the parents who thanked us every time we went to check on their child. Ultimately, it is our duty as doctors not to shirk or run away, but to serve and look after our patients in their times of need.

Dr Chan Poh Chong,
Senior Consultant, Division of General Ambulatory
Paediatrics & Adolescent Medicine,
National University Hospital (NUH)

I was a first-year infectious diseases registrar at TTSH when it became the designated national centre for SARS. I remember receiving a call from my Head of Department to do my first unscheduled call on that fateful Friday night when we opened the first dedicated SARS ward. I was later put in charge of screening and admitting SARS patients at the CDC and emergency department. Among the many I admitted was a fellow doctor. We had seen a SARS patient together when she was still undiagnosed. He, and his mother, did not pull through. SARS also gave me my first opportunity to do outbreak research. We found out that SARS continues to affect its victims long after recovery from the acute infection. Reflecting back, I see how frail and precious human life is.

Dr Lawrence Lee,
Associate Consultant,
Division of Infectious Diseases, NUH

I still remember vividly the memorable day, during the initial stirrings of SARS locally in 2003, when I emerged from my clinic room in the Institute of Mental Health (IMH) at 5.30 pm and saw the shutters of the clinic entrance coming down slowly. The clinical staff was told that the Health Minister would be meeting all the doctors in the lecture hall and nobody was allowed to move out of the hospital compound. During the brief meeting with then Health Minister Mr Lim Hng Kiang, we were told that there was a cluster of febrile cases in one of our hospital wards and based on the limited information available then, there was some likelihood that the cause might be SARS. There was an air of consternation, which then quickly transformed into anxiety about the uncertainty that followed. Over the next few days, we were not able to return to our individual homes but continued to work our hospital shifts. In the midst of the unfolding SARS epidemic, we felt a sense of unity, camaraderie, duty when we continued to trudge on despite the considerable paucity of clear data

about the coronavirus, potential morbidity and mortality that could accrue, and possible impact on our families and society at large.

Dr Sim Kang,
Senior Consultant,
Department of General Psychiatry, IMH

A greater emphasis on education and hygiene practices is among the more significant changes made to nursing practice after SARS. Upon admission, nurses tell patients about the importance of hand hygiene and the need to cover their noses or mouths when sneezing or coughing. Alcohol-based hand rubs are made easily available in common corridors and lift lobbies, at the foot of patients' beds and in other areas. Patients are monitored regularly for fever. If there's suspicion of an infection among groups of patients, the nurses will report to the hospital's Infection Control Team.

Dr Tracy Carol Ayre,
Director, Nursing, Singapore General Hospital (SGH)

- Long days and late nights with World Health Organization teleconferences;
- Camaraderie among front-line workers in the emergency department, ICU and others;
- Living in an unending series of N95 masks, yellow gowns and gloves;
- Waving goodbye to our toddlers on a big bus every morning because the childcare centre had to move from TTSH to the Boon Keng HDB flats;
- Stockpiles of ramen noodles in case we had to go into home quarantine.

A/Prof (Adj) Lim Poh Lian,
Head and Senior Consultant,
Department of Infectious Diseases, TTSH

It was teamwork and mutual support that helped us ride through the difficult and challenging times during SARS. When the Communicable Disease Centre (CDC) team expanded to also include many injects from the main TTSH, the camaraderie spirit remained.

When I was assigned to lead the team at CDC, the first reassuring statement came from the unit nursing officer, "Do what you need to do, we are all behind you," and from the Clinic Nursing Office, "We went through the Nipah outbreak together; there is no reason why we cannot handle this."

While it was easy to identify the common public faces that fronted SARS, let's not forget those who contributed in a silent way. Our medical officers worked in the front line at the shabby makeshift triaging site, sweating underneath their PPE and N95 masks, but no one walked away from

their duties. Dr Edmond Monteiro stood fast to man the HIV clinic, allowing the rest of us to focus on SARS. Kudos to all at CDC!

**A/Prof Leo Yee Sin,
Director, CDC, TTSH**

SARS did give us some lessons to learn from. As an organisation, we learned to work better based on trust, how timely communication could build faith in the leadership and among peers, and we have also become more cohesive. Many of these lessons prevailed till today, giving us much confidence to handle future crises as a cohesive unit.

**Mr Yong Keng Kwang,
Director, Nursing Service, TTSH**

It has never been easy for me when a patient dies. But during SARS, it was even more difficult as I see them dying in isolation. They were unable to receive visitors not only because they were denied visits from their loved ones, but also because their loved ones were also fighting for their lives in another ICU cubicle. Fighting to save lives during that period was emotionally and physically draining. What I took away from the experience was the realisation that nursing is a calling. Even though some of our friends were infected and one of our own passed on, the rest of us stood our ground to face this invisible enemy. That, to me, is a calling.

**Ms Rozana bte Arshad,
Nurse Manager, TTSH**


We suffered as the enemy, SARS, had infiltrated. Almost overnight, the nearly 100-year-old CDC underwent rapid changes and developments in order to cope with the aftermath. It gave me a lot of valuable insights and experience in managing a large-scale outbreak. Though there was some discrimination against healthcare workers initially, the nation stupendously responded by showing their appreciation for the sacrifices of those at the front line. The support was heart-warming and gave us the strength to carry on the fight.

**Mr Harbhajan Singh,
Senior Nurse Manager, TTSH**

During the SARS outbreak, some time after I had performed an autopsy on a deceased person who turned out to have SARS, I fell ill. I suddenly felt a chill and developed fever. I was eventually quarantined at TTSH, although the viral PCR was later negative. My best memory from the quarantine period was that of a pathologist from SGH who helped me relieve the boredom of quarantine. She phoned me every day at noon to play music to me over the phone for an hour.

A/Prof Cuthbert Teo, Editorial Board Member

I remembered how in the weeks before the crisis, I was reading with increasing alarm, about the SARS epidemic as it unfolded. What happened next brought the whole episode into our hospital. We had been preparing to do our work in uncomfortable set-ups, including wearing N95 masks when one day, it was announced that our Chief Executive Officer (CEO) and Chairman, Medical Board



A commemoration ceremony was held at the Singapore Botanic Gardens in July 2003, in remembrance of those who succumbed to SARS and in honour of all healthcare workers for their determination and perseverance in their fight against the disease

(CMB) had both been hospitalised for fever and we had a fever cluster in the hospital. We were not allowed home and were told to live in specially arranged hotel quarters. I remembered how our senior management were scrambling to make contingency plans to quarantine the staff and still get basic psychiatric services up. As part of the Child Psychiatry team that was considered relatively clean, having not been in the hospital, we were task to run outpatient services in Alexandra Psychiatric Outpatient Clinic. We donned full personal protective gear and worked 12-hour shifts clearing large caseloads of psychiatric outpatients. Meanwhile, back in the main hospital, the fever cluster turned out to be influenza and our CEO and CMB also recovered. The teams struggled with coping with a new way of ward coverage but things got better overall and all too soon, the crisis was over.

It seems so long ago now but asked to recall, I can only think of how we all seem to buckle down to work. I watched the news every night in our hotel room and couldn't help but feel admiration and pride in our medical colleagues who coped with the real SARS menace. I lost friends and colleagues in the crisis but I also learned valuable lessons about how stoic and responsible our medical teams were. I am glad that we didn't lose our heads or our minds amidst this all.

A/Prof Daniel Fung, Editorial Board Member

2003. It was the end of year 4 of medical school and our exams were just done. Most of us M4s had overseas medical electives planned out and were excited about heading out to explore our possible future career interests when SARS struck. I had always wanted to be a cardiologist since childhood and had planned out a paediatric cardiology rotation along with my friends to The Hospital for Sick Children in Toronto, Canada. However, as SARS had struck both cities, this elective had to be cancelled. I ended up doing an Ophthalmology elective at the University of Wisconsin in Madison, USA, instead, and it was a career defining move that led me to subsequently taking up a traineeship in Ophthalmology and permanently loaning my stethoscope to my now-anaesthetist wife!

I am grateful and inspired by the camaraderie, bravery and discipline showed by many of my seniors in the medical profession in successfully dealing with the SARS epidemic. Kudos to them!

Dr Jayant V Iyer, Editorial Board Member

I was completing my final months of housemanship when SARS struck Singapore. As a junior doctor, it was particularly unnerving to know that there were cases of SARS in the hospital that I was working in at that time and seeing men in spacesuits clean up the elevators every time a suspected case was transferred out to TTSH. It didn't help matters that ground workers were kept guessing about the situation and we only had limited information from the news on TV. There were plenty of unknowns and some of us were even joking that in the worst case scenario, we might be the last batch of housemen in Singapore.

Despite the many administrative boo-boos, the courage our seniors displayed kept the morale and spirit on the ground high. As housemen, we never doubted nor questioned our seniors' instructions as we knew that we were in good hands. We knew that they would sooner put their own lives on the line than to risk ours. From the medical officer who did not hesitate to start resuscitation without a powered air purifying respirator to the consultants who worked tirelessly without rest when manpower was halved, our seniors stood steadfast and fearless in our fight against this faceless enemy. I am proud to have been part of the fight against SARS. I can only hope that the lessons learned will not be forgotten and the virtues that ensured our survival then will not be diluted.

Dr Lim Boon Leng, Editorial Board Member

I was a first-year registrar in National Skin Centre. It was very quiet because we were, and still are, sandwiched between CDC and TTSH. The medical staff were split into two teams. Each took one week to run clinics while the other team did administrative work: review education, design slides, and so on. As a result, we came up with the first ever atlas of Asian skin and because I felt "left out" from the action, it spurred me to volunteer and run a free clinic in Woodlands.

Dr Martin Chio, Editorial Board Member

I was waiting to do an M4 elective at TTSH's emergency department. Obviously, it was cancelled. We went to play pool and watch movies, wondering if we'd ever get to finish school.

Dr Tan Yia Swam, Deputy Editor **SMA**

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