

CHAPTER 10

# 2021 – The Battle Rages On

2021 began with the hope that vaccination would return us to normalcy. But the virus had its own plans, reinventing itself repeatedly to perpetuate its existence. The variants, christened according to the letters of the Greek alphabet, showed off their skills with devastating effect. Singapore's COVID-19 numbers rose relentlessly as the virus deftly dodged vaccine-induced immunity, while striking hard at the unvaccinated. To our disappointment, the virus penetrated the defences we had set up so successfully in 2020, and clusters were recognised in the hospital, among patients and staff. Measures were tightened, and N95 masks became de rigueur in our wards. 2021 was tough. Coming through it was enervating and bruising.



For a second year, staff worked under strict restrictions which included rules against interacting and socialising with colleagues. Meal times are lonely affairs as chatting without a mask has been shown to be a risk factor for transmission of the virus.

## Shots of hope

The year began on a promising note with the advent of the mRNA vaccines, which were seen by many as representing the light at the end of a long tunnel.

SGH kicked off its staff vaccination exercise on 8 January 2021, three weeks after the health authorities first approved the vaccine. Healthcare workers and other frontliners were given priority, and within two months, about 65% of the hospital's staff had received their first dose. By the end of 2021, more than 95% of staff were vaccinated, along with 80% of the population.



## Safety first

When the in-house Vaccination Operations Group began working out the logistics of mounting a vaccination exercise for the staff, it emerged that the Pfizer BioNTech (BNT 162b2) vaccine came in multi-dose vials, meaning one vial was meant for five persons. The risk of overdose caused worries about patient safety. Infectious Diseases physician Limin Wijaya<sup>1</sup>, ever unflappable, quickly worked with her nurses to devise a series of steps that was not error-prone<sup>2</sup>. A single nurse acted as a preparation nurse, syringing out the five doses from each vial into five different syringes, and placing them into five different kidney dishes. The nurses who did the injections would use one syringe per patient and discard the entire kidney dish. There was no risk of giving a person more than the recommended dose.

To encourage vaccine uptake, the Ministry of Health (MOH) later allowed SGH to administer it to patients as well. This meant that the Vaccination Operations Group had to plan a programme for outpatient, and then, inpatient vaccination.



Label on each vial of vaccine indicated date and time the vial was opened for dilution, and when it was to be discarded.

To prevent mixing brands for first and second doses, MOH supplied only a single brand to each vaccination centre. Several months later, when it became apparent that some people were medically intolerant of the BNT162b2 vaccine, MOH gave SGH a small supply of a non-mRNA type (the Chinese Sinovac vaccine).

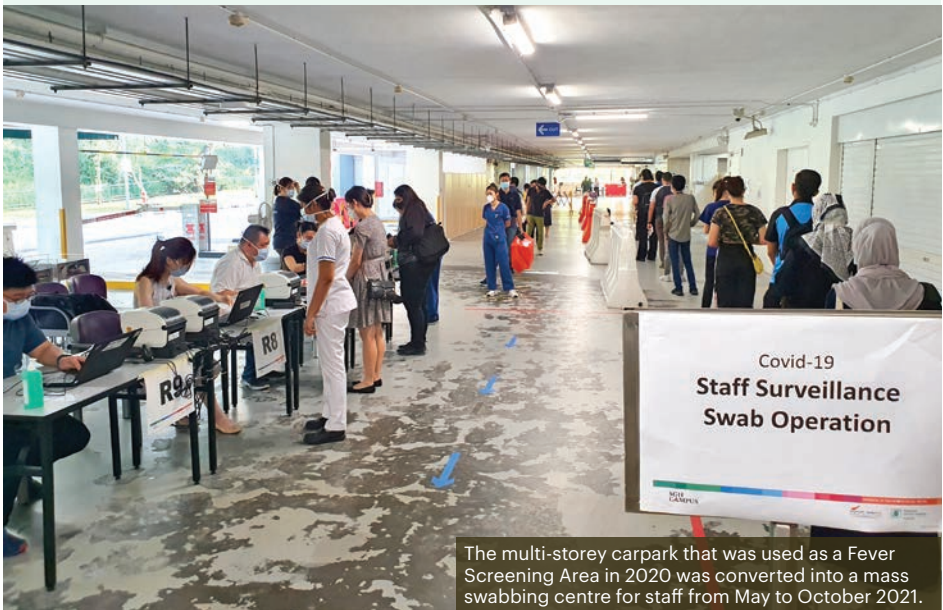
<sup>1</sup> Dr Limin Wijaya, Senior Consultant, Department of Infectious Diseases. She is also in charge of SGH's Travel and Vaccination Clinic.

<sup>2</sup> Up to the time of writing, no overdose has occurred in SGH, testimony to Limin's ironclad scheme.

## Testing times

In early May 2021, Singapore started to see a rise in cases. MOH mandated regular surveillance tests, called Rostered Routine Testing (RRT), for all healthcare workers. This was meant to detect infected but asymptomatic staff, thus preventing them from spreading the virus to their colleagues and patients.

SGH rolled out the operations on 8 May 2021, with doctors, nurses and allied health professionals volunteering to perform the swabs for polymerase chain reaction (PCR) testing. Staff were tested twice weekly. Six months and more than 136,000 PCR tests later, the operation wound down in October 2021 when SGH switched entirely to self-administered antigen rapid tests (ART) for staff RRT.



The multi-storey carpark that was used as a Fever Screening Area in 2020 was converted into a mass swabbing centre for staff from May to October 2021.

## Stressed

As the Delta variant rampaged through the community<sup>3</sup>, cases started to surface among staff. To prevent clusters from forming in the hospital, staff identified as close contacts of infected colleagues were quarantined. This principle had been applied in 2020 to great effect, but with staff of all stripes reporting positive results, the broadly-defined ring-fencing criteria created manpower problems. This problem was particularly thorny as it occurred at a time when the hospital was admitting more COVID-19 cases, many of whom were seriously ill.

### Loo Chian Min

to encourage doctors to help push your patients on trolleys rather than wait for porters - eg transfer from DEM, between wards, to OCH. Especially so if doctors are already accompanying, may not need a porter if doctors help push. Thanks everyone for helping.

When a cluster of cases involved porters, the large number hospitalised and quarantined almost brought this service to a standstill. Who would transport patients around the hospital for their various procedures? Loo Chian Min, Chairman, Division of Medicine, tapped on his own staff.



Facility engineer Krishna Muthu Barathi<sup>4</sup> was one of those who helped to cover porter duties, such as collecting medication for the wards from the pharmacy.

<sup>3</sup> Singapore's daily new cases topped 5,000 for the first time, with 5,324 cases recorded on 27 October 2021.

<sup>4</sup> Krishna Muthu Barathi, Facility Engineer, Department of Facilities Management & Engineering.

## Huddles

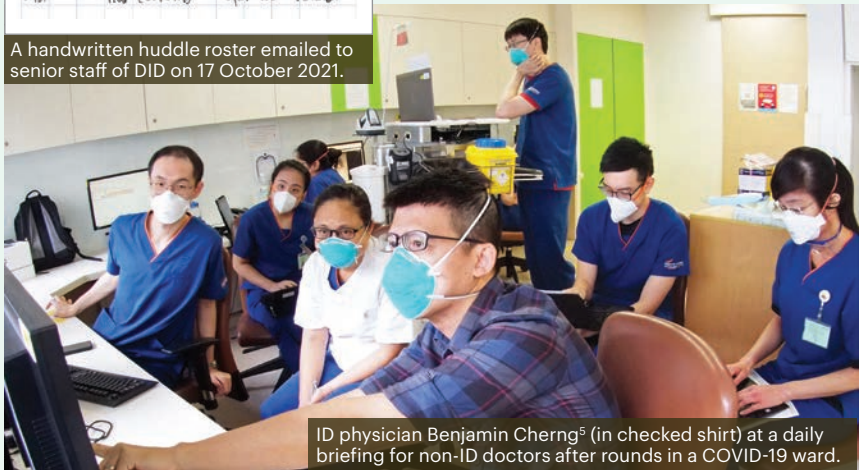
In October 2021, a new duty appeared on the monthly roster of the Department of Infectious Diseases (DID) – the COVID-19 huddle.

With hundreds of COVID-19 patients in the hospital, several wards were required to house them. Physicians from across the Division of Medicine were assigned to run these wards. Concerned that specialists outside the Infectious Diseases community would not be comfortable with the many facets of the care of COVID-19 patients, DID created the "huddle" roster. On top of their usual duties, ID physicians were put on a rota to huddle with individual teams, giving them a guiding hand on any aspect of COVID-19 management that they might have.

It was during this time that MOH received supplies of new drugs that could reduce the risk of progression to severe disease, if administered early. An important part of the huddle was to ensure that patients at high risk of deterioration received these medications.

Date	Ward	CG	88	67A	67B	65A	66B	65B	Huddle
18-21			Pror	Pror	Low	Low	TIT	TIT	
	cover	-	C14						
25-28			Pror	Pror	YC	Low	TIT	TIT	
	cover	-	YC						
29/29			C14 (67A/8) / 88 on 23rd Oct.						
30/31			Pror (88/67A) - after-ward rounds.						

A handwritten huddle roster emailed to senior staff of DID on 17 October 2021.



ID physician Benjamin Cherng<sup>5</sup> (in checked shirt) at a daily briefing for non-ID doctors after rounds in a COVID-19 ward.

<sup>5</sup> Dr Benjamin Cherng, Senior Consultant, Department of Infectious Diseases.

## Rules of 7

As the pandemic dragged on, fatigue and burnout were obvious. Colleagues were noticed to be more easily irritated. The Delta variant was known to be more transmissible and staff infections, whether acquired in the community or at work, increased. It was not easy to remain extremely scrupulous in daily activities over such a long duration.

At the same time, as it became obvious that the vaccinated generally did not suffer adverse outcomes, there was a growing sense of restlessness everywhere with living under restrictions of all sorts<sup>6</sup>.

SGH management viewed the worsening fatigue with concern. They also understood the desire for a less rigidly organised work-life. A Staff Well-being Committee was formed, and staff were informed of the Rules of 7 – to check out from replying of messages from 7pm to 7am, time-out of 70 minutes each day and lights out with 7 hours of sleep.



To moderate expectations formed by a long crisis, the hospital spelt out rules on work hours and provided mental wellbeing content to help staff cope with fatigue and burnout.

<sup>6</sup> The Government, too, moved towards accepting that COVID-19 would become endemic. On 30 August 2021, MOH rolled out its Home Recovery Programme. Fully vaccinated persons who were not in vulnerable groups were allowed to self-isolate at home if they became positive for COVID-19. On 9 October 2021, the 1-2-3 protocol was introduced. Symptomatic persons were encouraged to see a doctor, and to self-isolate at home if hospitalisation was not considered necessary by the doctor. Self-isolation ended after 10 days.



## Home at last

Like many other countries, Singapore moved gingerly towards living with COVID-19. Nationwide, there was a gradual relaxation of rules. The opening of Vaccinated Travel Lanes (VTLs) allowed people to leave Singapore for a holiday without quarantine in either country. At the same time, relatives who were living abroad could also fly in to see their loved ones in Singapore without worrying about a long quarantine period before and after their visit.

On 19 October 2021, the MOH followed by allowing healthcare workers to travel overseas, paving the way for many of our staff to go home for the first time in two years.



Nurse Chan Yee Sin<sup>7</sup> seized on the VTL to hold her wedding at home in Malaysia in December 2021.

<sup>7</sup> Chan Yee Sin, Senior Staff Nurse, Ward 52C (Neuroscience Intensive Care Unit).

## Purpose with Passion

Epidemics have been part of the profession for centuries and have served as shining badges of honour instead of blemishes. It is the moment when societal value is most acutely appreciated, selflessness most needed and bravery most evident. This is the very basis of the profession: to value service beyond reward (and, if absolutely necessary, personal safety). The profession has guided society through the plague, the Spanish flu and SARS; and emerged every single time with distinction. Even when the science was lacking, with candour, concern and courage, the sick have been cared for, the healthy sheltered and the storms weathered. Epidemic response is in the DNA of healthcare work because it embodies why we entered the profession.

Anantham Devanand<sup>8</sup> Senior Consultant, Department of Respiratory and Critical Care Medicine

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<sup>8</sup> Dr Anantham Devanand, Senior Consultant, Department of Respiratory and Critical Care Medicine. He is also the director of medical humanities in the Medicine Academic Clinical Programme. His quote is extracted from an essay published in the SingHealth Medical Humanities Newsletter Volume 1, Issue 3, February 2020.



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