Emergency Services in the Pandemic

A DEPARTMENT UNDER PRESSURE

1

Text and photos by Dr Jacqueline Tan

The start of this pandemic was characterised by noise. From the moment we were first alerted about a mysterious virus from China, our emergency department (ED) swung into action. We took painstaking efforts to identify potential cases, taking down travel and contact history to a level of detail that seems quaint now. Even before our first confirmed case, we faced a sudden increase in consults for minor respiratory symptoms from a worried public. Did it matter if one interacted for 30 seconds or five minutes with a confirmed case? Was mask-wearing necessary? No one had answers to these questions then. One of our first "2019-nCoV" cases, upon being diagnosed, promptly and very responsibly informed all his colleagues who immediately descended upon our department. This group was so large that at one point, our then-Chairman Medical Board had to address them with a loudhailer to reassure them that they did not require testing.

Migrant workers, hospital clusters and variants

It was a quiet Saturday morning in April 2020 when we noticed a stream of migrant workers presenting with COVID-19 symptoms. We were initially puzzled as they seemed to stay in different places, giving their addresses as "Seletar dormitory", "Punggol dormitory" and most mysteriously, "S11". We looked at their accommodation passes, and to our horror realised that these COVID-19-positive patients were all from PPT Lodge 1B, the second largest migrant worker dormitory in Singapore, located barely a ten-minute drive from our front door. At that moment, we realised that we had just stumbled upon a new dormitory cluster – one which would grow into the largest one in Singapore over the next three months.

2

Faced with the threat of being overwhelmed by COVID-19 patients from this mini-city of 14,000 workers, Sengkang General Hospital (SKH) decided to deploy teams directly into PPT Lodge 1B to see them in situ. In those pre-vaccination days, being deployed into "COVID-19 central" seemed like a dangerous but exciting endeavour, and many of our staff volunteered for shifts in the dormitory. Despite being deprived of their freedom when the dormitory was suddenly locked down, many of the migrant workers were patient, cooperative and grateful for the care they received. Good things do come out of trying times however, and after our six months there, we established a great partnership with the dormitory team that endures until today.

With this crisis mitigated, our department enjoyed a relative lull in the last quarter of 2020. However, the respite soon ended when a cluster was detected

in Tan Tock Seng Hospital (TTSH) in April 2021. We remember the pain of our friends and colleagues in TTSH who had to stay in hotels to keep their families safe during this period. Locking down TTSH meant that ambulances were diverted to other hospitals for weeks, adding to our patient load which had already rebounded to pre-COVID-19 levels. The prospect of more healthcare clusters also triggered a flurry of Safe Management Measures (SMMs) including split-team operations, rostered routine testing and the redrawing of our department's floor plan.

Just when the hospital clusters seemed to be settling, the Delta wave spread across the population and crashed down on us in the third quarter of 2021. This surge involved the vulnerable groups who were previously relatively sheltered from the pandemic, in particular the nursing home patients. Besides Singapore's second largest dormitory, SKH is also situated near 22 nursing homes, whose residents soon became our sickest COVID-19 patients yet. It is one thing to see thousands of fit, young migrant workers, but another thing to have patients who are bedbound, oxygen-dependent and occasionally in need of intubation. Even if they were well, it was frequently unfeasible to discharge them, as many homes could not care for COVID-19-positive residents. To deal with the large number of trolley-bound patients, we had to convert part of our ambulance area into a makeshift outdoor ward for our lodgers.

When the Delta surge finally abated, we turned to our fiercest challenge yet: the Omicron variant. In what we hope is the final episode of this saga, the pandemic has struck every level of society and strained every part of our healthcare system. The load in our isolation areas has more than doubled from the peak we experienced during the dormitory outbreak, putting unprecedented strain on space, manpower and processes. While previous surges were met with a drop in non-COVID-19 attendances, this has not been the case for Omicron. Furthermore, with so many healthcare staff down with COVID-19, we are forced to fight a harder battle with fewer resources than before.

The road ahead

After more than two years of fighting this battle, we have learnt many lessons along the way. Emergency departments are uniquely positioned as the critical link between the hospital and community. This often leads to challenges in implementing COVID-19-related policies and measures. A good example would be the introduction of Protocol 2 Primary Care (P2PC). While this ostensibly affected only GPs and polyclinics, it had a huge impact on the many primary care patients we also see daily at the ED. It took a great many emails and phone calls before P2PC was implemented for us as well.

Another implicit role we have is to serve as the healthcare system's "surge capacity". When new situations arise that existing workflows do not address, the ED is often the first to sense the problem and will have to manage it until the system "catches up". A recent example was when our department saw a surge of COVID-19-positive patients with end-stage renal failure, referred by their outpatient dialysis centres to us. One patient referred to us for routine dialysis was stuck waiting for a dialysis machine in the ED for so long that she eventually required urgent dialysis in the High Dependency Unit.

We understand that no policy is perfect at initial implementation and several cycles of improvement are often required to optimise the policy. However, we hope for these cycles to happen faster. One week of office-hours operations lasts 40 to 48 hours, but to our department which is open 24 hours a day, seven days a week, a week is 168 hours long!

Any changes to the ED workflow are like fixing a car's engine while the car is in motion. We need adequate warning before changes are made, especially if they involve instructions disseminated to the public.

Light at the end of the tunnel

Despite the challenges, I have many things to be thankful for. Firstly, as a young specialist, it has been my privilege to be able to put my skills and training into action amid this crisis of a generation. I am thankful for my hospital's leadership and our Crisis Planning and Operations team for their foresight and initiative to manage the many challenges we have encountered. I am also grateful to work in a young department that is open and responsive to change. During current times when many were cooped up at home due to SMMs, it was a joy to still be able to work face-to-face with friends. Special thanks go out to my pandemic team for the countless hours we spent creating workflows to bring order to chaos. Until we reach the end of this pandemic, let us continue to support one another and collectively find the will to keep the fight going, one day at a time. ◆

Legend

1. Expanded fever screening area to accommodate trolley patients during the Delta surge

2. From left to right: Prof Ong Biauw Chi and Drs Pek Jen Heng, Phua Ken Lee, Jacqueline Tan and Boon Yuru at the operations planning meeting at PPT Lodge 1B

3. Workers queuing to register with a nurse while others consult ED doctors at the S11 night clinic

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