Leading a COVID-19 cohort ward without blades: a surgeon's perspectives

Editor

The recent explosion of COVID-19 in migrant workers in Singapore has resulted in the nation having South East Asia's largest recorded outbreak[1]. With physicians stretched to capacity, this has resulted in reorganization of the workforce[2] and surgeons being redeployed to the front line to assist with COVID-19 clinical responsibilities.

Managing patients without blades is not a routine that most surgeons are familiar with. Concerns regarding unfamiliarity with COVID-19-related medical issues may surface but it is inevitable that as the pandemic continues, surgeons must adapt nimbly and step out of their comfort zones into new environments[3]. As a consultant surgeon in a tertiary acute care hospital (Khoo Teck Puat Hospital) in Singapore, the author was tasked to lead a COVID-19 cohort ward comprising patients with mild severity. The journey can be divided into preparatory, ward execution and sustenance phases.

In the preparatory phase, a key domain includes donning and doffing of personal protection equipment (PPE), transfer of patients, and clinical updates regarding COVID-19 infection and management[4]. The COVID-19 cohort ward is segregated into cold, warm and hot zones with a stepwise escalation in PPE requirements for sustainability (*Fig. 1*).

The ward execution phase requires a targeted approach to maximize efficiency of interactions with patients. Judicious use of investigations is enforced in view of the burden on transport logistics and the cleaning team. Radiological imaging that is operator dependent is avoided and alternatives are considered. Haematological investigations are paired with nasopharyngeal swabs to minimize porter use. A senior doctor is paired with a buddy junior doctor during ward rounds. Challenges include heat and perspiration forming under the PPE, fogging of goggles impairing vision, and decreased audibility of voices behind N95 masks. Self-awareness and restraint are required to avoid adjustment of PPE in the hot zone, which can potentially compromise its integrity.

In the sustenance phase, the safety of team members is the surgeon's mandate as team leader. Recognizing the high-risk environment, staff fatigue resulting in possible psychological crisis requires support, reasonable scheduling and appropriate rest[5]. Having both surgeon and physicians on the same team compliments and facilitates transdisciplinary collaboration, optimizing care for patients. Ensuring a monthly rotation for COVID-19 ward coverage also improves morale on the ground.

As perspectives of this unfolding crisis[6] continue to evolve, the experience of being a surgeon in the pandemic era[7] will be novel to many. Leading a COVID-19 cohort ward without blades demonstrates heart and willingness to serve our patients and colleagues in need. As with every dark cloud there is a silver lining within the crisis which lies in the friendship, trust and transdisciplinary collaboration cultivated during the journey that will surely be remembered for many years after the pandemic era ends.

C. L. K. Chia

Department of General Surgery, Khoo Teck Puat Hospital, Singapore

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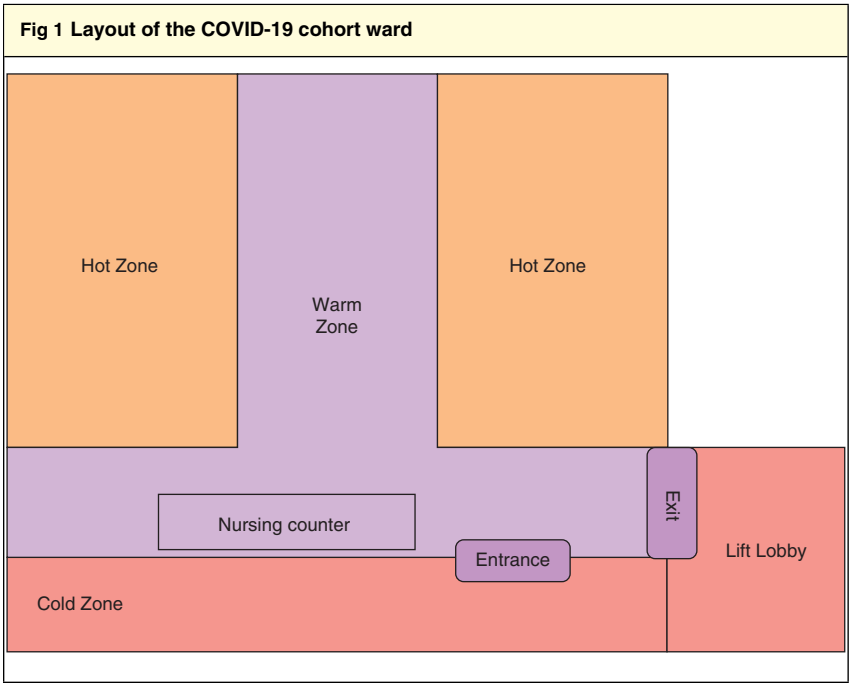
Fig 1 Layout of the COVID-19 cohort ward



Cold zone: clean zone where computers, shower facilities, pantry and lockers are situated. Warm zone: only movement of healthcare personnel working in the COVID-19 ward is allowed. No patient movement is allowed in the warm zone. Nursing counter and trolley for full personal protective equipment (PPE) gowning are also located in the warm zone. Hot zone: 'dirty' zone where patient cubicles and beds are located. PPE requirements in the different zones are: cold zone, surgical face mask; warm zone, N95 mask; hot zone, shoe cover, hairnet, long sleeve gown, gloves, N95 mask and goggles.

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