

# Coronavirus 2019 Silver Linings

Amelia Santosa,<sup>1,4,a</sup> Gail Cross,<sup>2,4,a</sup> Jolene Ee Ling Oon,<sup>2,4</sup> Sophia Archuleta,<sup>2,4</sup> and Yock Young Dan<sup>3,4</sup>

<sup>1</sup>Department of Medicine, National University Hospital, Singapore, <sup>2</sup>Division of Infectious Diseases, Department of Medicine, National University Hospital, Singapore, Singapore, <sup>3</sup>Division of Gastroenterology & Hepatology, Department of Medicine, National University Hospital, Singapore, Singapore, <sup>4</sup>Yong Loo Lin School of Medicine, National University of Singapore, Singapore

A heightened state of alert due to the Coronavirus Disease 2019 (COVID-19) outbreak was declared by the Singapore Ministry of Health on February 7, 2020. Within the hospital, team reorganizations, workflow revisions, and physical segregation caused anxiety among healthcare workers (HCWs). Fear of the unknown and emotional and physical fatigue started to take their toll on HCWs. We share our learning journey over the first 8 weeks of COVID-19: the importance of acknowledging fears and questions, and transforming them to collective knowledge; the role of empathic, hands-on leadership that brings camaraderie and calms scepticism; the importance of validating efforts and acknowledging hardship; and, most importantly, the security that comes from camaraderie, breaking down hierarchical barriers, and motivating each other to keep on going.

**Keywords.** burnout; COVID-19; pandemic.

It was just past noon on the first Friday since Singapore declared DORSCON Orange (Disease Outbreak Response System Condition guides our national response framework to infectious disease outbreaks) [1]. The Department of Medicine Secretary had just received her delivery of “potong,” a traditional ice cream dessert. A few days prior, the Chief of Medicine roped her in to help with procuring treats for the pandemic teams. After some days of sourcing for suitable snacks—sweet enough to lift morale at a cost that would not break the bank—she finally settled on the colorful ice cream sticks. It was not easy to find someone to deliver in bulk at such short notice, but she was determined to play her part. She could not help but wonder about

the weeks that followed. There had to be more to it than ice cream.

On January 23, 2020, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) reached Singapore’s shores. A heightened state of alert was declared by the Ministry of Health on February 7, 2020. The National University Hospital, a 1200-bed academic hospital in Singapore, wasted no time in drawing up and implementing a response plan to prepare for the pandemic.

## THE CALL TO ARMS

The Department of Medicine, consisting of 9 speciality divisions, lent their physicians to a master roster, which allowed flexibility to mount 6 new “pandemic” teams (and more if needed) to exclusively manage suspect or confirmed coronavirus disease 2019 (COVID-19) cases in designated wards. Junior residents organized their responses through their Chief Residents, with the first group to man the pandemic teams being those who volunteered themselves on this frontline. These teams, affectionately called our “dirty-teams,” were segregated from the “clean-teams” who would continue with routine service provision in the hospital. The readiness with which people stepped up was every roster planner’s dream. However, behind that response was the synchronous

realization that something bigger than individual interests was unfolding—the kind of deep resolve that develops when people are thrust into crises.

Anxiety was clearly (and understandably) palpable: people were worried for their safety and for their families’ health and wondered whether they were prepared to work on the frontline. A helpline was set up, manned by the long-suffering “Coronavirus Consultant,” who answered queries from anyone in the hospital; grand-rounds, journal-clubs, and sharing sessions on COVID-19 were held with record attendances. The questions and feedback raised enriched our response plans. However, the preparedness was causing disruption to the status quo as annual leave was canceled, people had their workload doubled or tripled, and staff segregation lowered morale.

This is where true leadership came to the fore. Good leadership requires discipline, organization, and (often) charisma, but a strong dose of positivity can rebuild flagging morale: “this is not going to be easy, but we can do it.” Hands-on leadership fostered camaraderie and built an overarching fellowship that bridged the chasm across hierarchies. Jokes were shared and reshared, bringing lightness where it was needed most, with various pandemic response team members immortalized in a comic strip by the

Received 14 April 2020; editorial decision 5 June 2020; accepted 9 June 2020.

<sup>a</sup>A. S. and G. C. contributed equally to this manuscript.

Correspondence: Dr Amelia Santosa, MBBS, MRCP, MMed, FAMS (Rheumatology), 1E Kent Ridge Road, Level 10 Tower Block, 119228 Singapore (amelia\_santosa@nuhs.edu.sg).

## Open Forum Infectious Diseases®

© The Author(s) 2020. Published by Oxford University Press on behalf of Infectious Diseases Society of America. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs licence (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial reproduction and distribution of the work, in any medium, provided the original work is not altered or transformed in any way, and that the work is properly cited. For commercial re-use, please contact [journals.permissions@oup.com](mailto:journals.permissions@oup.com)  
DOI: 10.1093/ofid/ofaa230

National University of Singapore, our partner university (Figure 1).

### BEING A DOCTOR DURING CORONAVIRUS 2019

By the end of the first 2 months, 1069 COVID-19 suspect patients (of which 58 were confirmed cases) passed

through our pandemic wards. Our ward round routine repeated itself every day—swabbing patient after patient, deisolating most, only for new patients to fill the beds immediately. We soon realized that our training had prepared us to care for these patients' clinically, albeit somewhat added by

the neverending donning and doffing of personal protective equipment (PPE), but the challenge was managing their emotional wellbeing. People blamed each other for spreading the infection; parents refused to act as caregivers for their children with suspected COVID-19 for fear of being infected themselves;



Figure 1. NUS COVID-19 Chronicles Episode 11: Our Duty, Our Calling. Credits: NUS Yong Loo Lin School of Medicine. Available at <http://nusmedicine.nus.edu.sg/medias/news-info/2233-the-covid-19-chronicles>

friends messaged, not to ask if their admitted pals were okay, but to determine whether they were at risk. Similar to observations in other infectious diseases such as acquired immune deficiency syndrome [2] and Ebola [3], the discrimination was real and painful for our COVID-19 patients, who wore this while dealing with being separated from their loved ones and feeling unwell. When patients could finally leave the hospital after the 2 weeks typically required to clear the virus, we celebrated by taking a “family photo” with the ward team (who became very attached to their patients) and shared words of encouragement to let them know that we stood with them.

Even though being in PPE was hot and uncomfortable, the ward rounds long, and watching patients you cared about become unwell was heart-breaking, the camaraderie built over spilt tears, blood, and universal transport media was undeniable. We checked in on each other; we shared food; we took silly photos together. This disease and perhaps the PPE put us all on par. We started off as colleagues who became friends, but now, we could affectionately call ourselves the “pandemic” family.

### ON ICE CREAM AND CUPCAKES

Our concerns soon shifted to the real risk of physical and emotional burnout and the sustainability of seeing the pandemic out. Nevertheless, the outpouring of support from within the hospital and the public and the solidarity on the ground kept us going. Ice cream, cupcakes, and packed lunches were sent regularly to HCWs. Among peers, many bought little treats to encourage their colleagues, so much that the pandemic teams joked that they would get fat during their “hardship” rotation.

When we ask each other why we are in this profession, the majority assert that they are in it due to a sense of calling, which is strongly associated with life meaning and commitment to patient care

[4]. This pandemic gave us the opportunity to be part of a generation of doctors who get to discover a brand new disease, renewing our curiosity as physicians and inspiring us to care for our patients even more diligently. However, our aspiration to help was often at direct tension with our other work (administrative and research) and emotional commitments (to ourselves, to our families), leading to a high rate of burnout. Disease outbreaks, including SARS in 2003 [5] and the current COVID-19 [6], elevate stress levels, induce anxiety, and cause insomnia, which may persist well after the event has passed. Small gestures such as thank-you notes, treats, and most importantly supportive colleagues evoked positive emotions, which helped to validate efforts and nurture intrinsic motivating factors; the calling to practice medicine, the sense of pride by being of service. This created a positive feedback loop of solidarity and optimism, which people were motivated to pass on and allowed us to keep going.

### WHAT LIES AHEAD

Experts predict that the outbreak may not end anytime soon and that we can expect to see it out only when 2020 ends [7]. That is a long time for HCWs to have to sustain themselves on sheer willpower, their sense of responsibility, and lots of sweets. However, we can and must do it, and with empathic and effective leadership, by acknowledging fears and validating efforts, we will maintain our course. We must look out for one another, be willing to step up when others are struggling, and maintain our trust with each other. As this pandemic evolved, we discovered new challenges: increasing strains on our healthcare system from the prolonged burden of the pandemic and from the suppressed need to continue our care for non-COVID-19 patients; emerging risk populations; evolving epidemiology of the virus; threats to the global economy; and uncertainties of the new normal.

Coronavirus Disease 2019 created great disruption to our lives.

Nevertheless, it brought people together in a common shared mission. One in which friendships and trust bridged the hierarchical and professional divide between nurse and doctor, senior and junior. The good will, charity, and camaraderie forged in this difficult period brought the identity of belonging to a healthcare “family” and “teamwork” to a new level. When COVID-19 ends, we are convinced that the shared bond will forever be etched in the memories of our generation. A generation thrown into the extraordinary throes of uncertainty and chaos, who stood up to the calling and challenge with humility, appreciation, and awe.

### Acknowledgments

This article is dedicated to our family—the Department of Medicine, National University Hospital, Singapore.

**Authors contributions.** A. S. contributed to conceptualization, content, and editing of the manuscript; G. C. contributed to conceptualization, content, and editing of the manuscript; J. E. L. O. contributed to conceptualization, content, and editing of the manuscript; S. A. contributed oversight, guidance, and editing; Y. Y. D. contributed oversight, guidance, and editing.

**Potential conflicts of interest.** All authors: No reported conflicts of interest. All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest.

### References

1. What do the different DORSCON levels mean. Available at: <https://www.gov.sg/article/what-do-the-different-dorscon-levels-mean>. Accessed 17 March 2020.
2. Rankin WW, Brennan S, Schell E, et al. The stigma of being HIV-positive in Africa. *PLoS Med* **2005**; *2*:e247.
3. O’Leary A, Jalloh ME, Neria Y. Fear and culture: contextualising mental health impact of the 2014-2016 Ebola epidemic in West Africa. *BMJ Glob Health* **2018**; *3*:e000924.
4. Tak HJ, Curlin FA, Yoon JD. Association of intrinsic motivating factors and markers of physician well-being: a national physician survey. *J Gen Intern Med* **2017**; *32*:739–46.
5. McAlonan GM, Lee AM, Cheung V, et al. Immediate and sustained psychological impact of an emerging infectious disease outbreak on health care workers. *Can J Psychiatry* **2007**; *52*:241–7.
6. Lai J, Ma S, Wang Y, et al. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Netw Open* **2020**; *3*:e203976.
7. Tan A, Kurohi R. Covid-19 likely to last till end-2020 at least: experts. Available at: <https://www.straitstimes.com/singapore/health/coronavirus-covid-19-likely-to-last-till-end-2020-at-least-experts>. Accessed 19 March 2020.