

Editorial

Life in Times of COVID-19

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The global pandemic of COVID-19 has swept all before it changing our family, working and social life profoundly and perhaps permanently. It is almost impossible to record events in a monthly journal when familiar landmarks at work and in the laboratory and in medical science are changed on a weekly, sometimes daily, basis.

The human cost has been immense, and our sympathies must go to all who have lost family, friends or colleagues to the virus. The nightly scenes on the news of health care workers from all over the world giving care and comfort to the legions of COVID-19 patients on wards and intensive care units have been as moving as it has been inspiring.

For the health care workers and supporting key workers who have died there must be a special place in our hearts. Whatever efforts we make to help stem the pandemic and whatever triumphs we have over the disease; we will always remember those who have paid with their lives. In the UK, there has been the moving cheering and clapping of health care workers at eight in the evening every Thursday. There must be a collective commemoration at a suitable time.

The analogy of civil emergencies with war is, more often than not, overplayed, but for this pandemic the global scale of suffering and disruption that has touched all of us has had many commentators and columnists, and indeed ourselves, reaching for the military metaphors. Particularly in the early stages of the epidemic and public response, when each day and each week brought astonishing news and change, there was no real analogy except a war or revolution and Lenin's famous aphorism, "There are decades where nothing happens; and there are weeks where decades happen" seemed to be reportage rather than a dusty fragment of history.

As a medical journal, we can't possibly keep up a running commentary on all these events, but we can provide some reflection. In future issues we will have articles on recent developments in blood services as they have adjusted to the new situation and also responses to the need for new reagents, tests and therapies. But it would only be fair to mention the immediate reaction of hospital and blood services.

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Beyond the direct care of patients, we know the volume of sheer hard work, ingenuity and improvisation that has been required from laboratory staff and supporting services across all hospital departments and primary care health facilities and blood services, not just to support front-line staff, but also to keep other essential care functioning.

There has been an astonishing effort to provide blood and blood products through this first wave of COVID-19. We commissioned two articles at the start of this phase of the epidemic, which look at the response of blood services to the first SARS epidemic in 2002-2003¹. The SARS virus caused much higher case fatality, but apparently less person-to-person transmission and was successfully contained. The articles by CK Lee from Hong Kong² and Dana Devine³ from Canada describe how blood services in two very different epidemiological settings responded to the epidemic.

In Hong Kong, a rapid early public health response to the epidemic allowed the epidemic to be contained. Nevertheless, the blood service faced considerable pressure as mobile clinics were cancelled and travel to central collection centres curtailed. These difficulties with blood supply were offset by a reduction in demand, as observed in most countries through the current epidemic. There was a time when we hoped that the novel coronavirus SARS-CoV-2 now plaguing us could be similarly constrained. This was not to be.

However, the measures implemented for SARS in Hong Kong in 2003, namely social distancing, use of personal protective equipment and screening of donors, laid the foundation for many blood services' response to this current epidemic. This experience and subsequent epidemics, including influenza H1N1, has allowed a swift and effective response to COVID-19 with relative few infections and deaths⁴, in spite of the proximity of Hong Kong to the epicentre of the disease in Wuhan. Similarly, the methods developed by Dr Lee in the SARS epidemic in 2002 described in this issue, have enabled Hong Kong to maintain the blood supply in this COVID-19 pandemic and have been shared by webinar and have helped many blood services cope with the current crisis (https://education.isbtweb.org/isbt/#!*menu=8*browseby=8*sortby=2*label=19776) (Accessed 1st May 2020).

Canada experienced a potentially serious epidemic of SARS in 2003 with 438 probable or confirmed cases of SARS with 44 deaths; 43 deaths and 375 cases occurred in Toronto³. Although this outbreak was much smaller than the current COVID-19 epidemic, there are some striking similarities between the problems faced by blood services in Canada in 2003 and those faced by many blood services facing COVID-19, with considerable difficulties in collection of blood, matched by a reduction in demand.

Perhaps the wider lesson from the experience of Hong Kong and Canada was that very real threat posed by SARS in 2003 prompted improved pandemic planning. In Hong Kong, public health measures were quickly enforced and widely accepted. In Canada, the formation of the Public Health Agency of Canada and through pandemic planning, has been the foundation of the response to COVID-19. In both countries, the evidence of the effectiveness of these plans is in the relative low incidence of cases and mortality, compared to countries with, shall we say, less clear and informed leadership⁴.

If Hong Kong and Canada represent good examples of how effective planning can reduce the impact of a potentially catastrophic pathogen, the global preparation for the epidemic has been variable. There has been a drive since the SARS outbreak in 2003, reinforced by the Ebola epidemic, to co-ordinate the public health response to emerging epidemic threat⁵. In a prescient book, published only last year, Jonathan Quick, previously at the World Health Organization (WHO) and now at

Harvard, described how a new virus could kill millions of people and wipe out 5-10% of global GDP. He laid out the necessary planning needed by world leaders, health professionals, the scientific and business community, media and indeed all of us to work together to prevent epidemics⁶. Without the compelling example of a real pandemic, such plans were not realised at sufficient scale in sufficient time.

However, there is now a real willingness for countries and the business, medical and scientific communities to work together on ending this crisis and preventing, or at least attenuating, the threat and impact of future epidemics. The WHO has brought together a powerful coalition to improve access to testing and, we hope, drugs and vaccines⁷. This international collaboration is most welcome and there is real promise of co-ordinated action⁸. However, there are many uncertainties about the way out of the present lockdown, the timing(s) and magnitude of subsequent waves of the epidemic and the feasibility and time-scale for effective vaccines and therapy. It would take an issue of the journal to describe all these, but they are eloquently summarised in a recent informative interview by Jeremy Farrar, Director of the Wellcome Trust, who has been prominent in co-ordinating many global initiatives to combat the virus and promote speedy and equitable access to tests, drugs and other therapies and vaccines as they become available⁹.

There are many hurdles and uncertainties ahead, but an enormous amount has been done in a very short space of time. The epidemic has a long way to run, but as was said nearly 75 years ago¹⁰, "Now this is not the end. It is not even the beginning of the end, but it is, perhaps, the end of the beginning".

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