**Blood Banking in the Time of Corona**

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COVID-19 has been overwhelming global health systems – filling up wards and ICUs, ripping through supplies and equipment, and testing the capabilities of health workers and front-liners. It is arguably one of the most life-altering events our world has seen in recent history. There is, however, a grimmer reality that we must face, a consequence of already stretched health systems. Global blood inventory is falling, and it is falling rapidly. In the midst of the COVID-19 pandemic, blood donations are severely affected, but the demand for blood does not stop. Think of patients with thalassemia, cancer, and other diseases that require regular transfusions. Not to mention the blood required for surgeries and emergencies who now find another dimension of difficulty in their situation. With the drop in donations, [hospitals have no choice but to ration blood](https://www.cnbc.com/2020/03/23/blood-donations-needed-during-coronavirus-pandemic.html) – halving the transfusions given to patients with existing conditions and rescheduling elective surgeries as much as possible.

Prior to the emergence of the virus, countries were already experiencing problems with blood donation. The shift from commercial blood-banking to voluntary donations, perishability of blood, [aging donor bases](https://www.channelnewsasia.com/news/health/fewer-youths-donating-blood-in-singapore-amid-growing-demand-8935242?cid=h3_referral_inarticlelinks_24082018_cna), and the fact that donors have to rest and regenerate for two to three months after each donation already complicate blood systems (Chua & Senga, 2020). These led to research that tried to increase donation through recruitment and retention of donors. One of these avenues is through partnerships with private firms, schools, and communities via mobile blood drives. However, the COVID-19 pandemic has effectively removed this option because countries went on lock-down. This is a problem especially for developing countries where mobile blood drives constitute up to 80% of donated blood (Nalupta, 2011). Even in developed countries, reports of [US blood banks losing a projected 355,000 donations because of 12,000 cancelled blood drives](https://www.usnews.com/news/health-news/articles/2020-03-19/blood-donors-urgently-needed-to-avert-shortage-amid-outbreak) and blood banks in [China requiring 300 donations daily versus an average of 10 donations per day](https://www.channelnewsasia.com/news/asia/china-blood-donations-dry-up-covid-19-coronavirus-12472326) are signals of what is to come: a second wave of medical emergencies resulting from lack of blood, among others. Blood is vitally important, even more so now with doctors seeing that [convalescent plasma treatment](https://www.nytimes.com/2020/03/26/health/plasma-coronavirus-treatment.html), where donated blood plasma from recovered COVID-19 patients is used to help still-afflicted patients, may be effective in fighting the virus.

In response to this, we see countries sending out calls for blood donations to the public. Usually, this increases donors during a period of disaster. For example, during 9/11, [a call for blood even led to a lot of waste due to an influx of donors](https://www.theopennotebook.com/wp-content/uploads/2012/06/TNR-BAD-BLOOD.pdf). But the COVID-19 situation is different. Even with the persistent call for blood, the usual influx of donors during times of need is not seen. This is because donors face a myriad of problems: (1) donation is more difficult because of social-distancing, and (2) people are [afraid to donate with the thought that they might get infected in a facility that attracts crowds](https://www.fiercebiotech.com/medtech/blood-drives-and-donors-fall-off-as-coronavirus-worries-grow).

With the projections of this “new normal” continuing through the end of the year, it is important that blood supply is replenished and maintained. Overall, three things have to be aligned. The first and most important is donor education like we’ve never seen before, done on a massive scale – global in leadership, yet local in implementation – stressing the importance of blood donation especially in a crisis. This has to be done immediately and with ingenuity (because of lock-downs) given the possibility that the pandemic continues for a sustained duration. Second is an increase in the accessibility of blood donation facilities. This may be in the form of transportation for donors or mobile blood banking that goes directly to the donors themselves. Lastly, the assurance of donor safety, while maintaining operational efficiency and donor health tracking, is essential. This ensures that more donated blood is processed while concurrently reducing the duration a person spends donating. It also allows blood banks to keep track of when to ask donors to donate again in the future, an important part of sustaining supply in the long run.

COVID-19 is a huge health and operations problem, and blood donation is but one system affected. There are no easy solutions, and all are required to operate under constraints that none of us have faced before. But it is a reality that we must face, nonetheless. These systems need to be managed creatively and adaptively amidst the pandemic. It is one tall task but if done right, can save many lives.

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