



A steady stream of 400 donors is needed daily in Singapore, just to keep the blood stock from falling, says the writer. The country's present demography requires maintaining at least nine days of reserves. When stocks fall below six days' worth of reserves, the health system starts deferring non-urgent or elective operations, so as to prioritise the supply for life-saving procedures, the writer adds. ST FILE PHOTO

As the population in Singapore ages, we cannot simply rely on people's innate sense of duty to replenish our blood stocks. It may be worthwhile reminding our citizens that they, themselves, may require blood transfusion at some point in their lives. Donating blood when we can serves as an investment for the future, ensuring there is a readily available supply when the need arises.

The blood equation that Singapore needs to balance

Our stocks of blood could face shortages as the population ages and donors dwindle. This can put the healthcare system at risk.

Teo Yik Ying

Of late, the stocks of O+ and O- blood here have been at critically low levels. This has prompted the Health Sciences Authority and the Singapore Red Cross to issue a joint appeal for eligible donors to come forward and donate blood.

Having a dependable supply of blood is integral to the resilience and performance of a health system, as shortages of blood stock directly compromise the ability of healthcare workers to perform life-saving operations.

In fact, the World Health Organisation has a Global Database on Blood Safety and Availability to chart the ability of countries' health systems to provide safe and adequate blood, and to recommend a sustainable strategy that relies on the collection of blood from regular, voluntary, unpaid donors.

What many people don't realise is that Singapore uses about 400 units of blood every day. This means we need a steady stream of 400 donors to come forward on a daily basis just to keep the stock

from falling.

Any time there is a dip in attendance by regular donors, either due to overseas travel or public holidays, this fragile balance will be upended and we need to dip into the reserves.

Singapore's present demography requires maintaining at least nine days of reserves. When stocks fall below six days' worth of reserves, our health system starts deferring non-urgent or elective operations till a later date, in order to prioritise the dwindling supply for life-saving procedures.

The present shortage that Singapore is facing is not new, but has been recurring almost every year during the months of January and July.

This trend is worrying, and points to an increasingly fragile national blood system as Singapore's population gets older.

RIISING NEEDS OF GREYING POPULATION

There is no question that Singapore will become a super-aged society.

Our life expectancy, at around 83 years, is one of the world's

highest, while our fertility rate is among the world's lowest, at 1.04.

This double whammy means the proportion of elderly people aged 65 and above is going to increase steadily from one in six in 2020 to one in four in 2030, and almost one in three by 2050.

Why is this significant to a national blood system?

An ageing population means that the demand for healthcare services, such as surgery, cancer treatments and other medical interventions, will go up.

Blood is a critical component in many of these medical procedures.

And yet the proportion of eligible blood donors is shrinking, as only healthy individuals aged between 16 and 60 are permitted to donate blood.

To tackle this rising demand and dwindling supply, we have to be even more innovative at encouraging eligible people to come forward.

After all, the Singapore Red Cross estimates that only less than 2 per cent of the population regularly donates blood.

So why is there this reluctance in the population to donate blood?

REASONS FOR NOT DONATING BLOOD

I conducted an informal poll of my colleagues at the National University of Singapore Saw Swee Hock School of Public Health on the likely reasons people are not coming forth to donate blood.

Perhaps unsurprisingly, the two most common reasons cited are the lack of time and the inconvenience of going to donation centres. Simply put, setting time aside to donate blood is not something that most individuals prioritise.

This is despite the exceptional efforts by the Singapore Red Cross in organising community blood drives across different parts of Singapore, precisely to make it easier for people to come forward. These community drives are in addition to the five blood banks that operate until 8pm on most weekdays to accommodate interested donors.

Perhaps, the public is not even aware of the constant need for blood donations.

Many people still believe that blood stocks are utilised only during emergency medical procedures, not realising that blood is actually required even for elective operations, such as bypasses, joint replacements, or cancer tumour removal operations.

In an increasingly "me-first" world, some individuals may also ask what's in it for them, or even whether donating blood can harm them.

We need to address such misgivings.

SPREAD THE MESSAGE

First and foremost, we need to adopt the Singapore Red Cross' recommendation to include the topic of blood donation in the mainstream school curriculum.

The focus here is to inculcate a lifelong habit and commitment to blood donation, by tapping young students and equipping them with the right knowledge and facts.

Singapore Red Cross actually collaborates with schools to conduct roadshows and organise learning journeys to the blood banks, but these will always be perceived as extracurricular and ad hoc by students and teachers.

The mainstream curriculum should incorporate content that subtly makes students aware of the importance of a healthy and socially responsible lifestyle that includes regular blood donation.

Young people are also spending more time on social media, following celebrities and influencers. We should capitalise on this trend for awareness campaigns, or even for scheduling blood donation appointments.

Local celebrities such as Lina Ng and Shaun Chen have come forward to lend their star appeal to highlight the latest shortage of blood stocks and to mobilise their followers to address it. Such exemplary behaviour should be recognised and encouraged, especially since celebrities have the ability to influence many.

Let's also tap the positive peer influence of young donors, perhaps by correlating their contributions to the number of

lives impacted.

Imagine a world where blockchain technology enables donors to know the difference their donation made, where fitness or workplace apps also provide timely notifications about local blood drives and track donation history, as well as issue digital certificates that can be shared on social media to create a sense of pride and encourage participation.

Technological innovations can augment the present mobile donation drives at workplaces, school campuses and community centres, and hopefully persuade more people to donate blood regularly.

NO SUBSTITUTES FOR BLOOD

As the population in Singapore ages, we cannot simply rely on people's innate sense of duty to replenish our blood stocks.

It may be worthwhile reminding our citizens that they, themselves, may require blood transfusion at some point in their lives. Donating blood when we can serves as an investment for the future, ensuring there is a readily available supply when the need arises.

Despite advances in medical science, there is still no substitute for human blood. And regular blood donation remains the only way to maintain a sustainable and accessible blood supply for a healthcare system.

So, if you are healthy, between the ages of 16 and 60, and weigh at least 45kg, please consider visiting any of the community drives or blood banks nearby to make your donation today.

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