

# What the COVID-19 pandemic can teach us about inclusive blood donation

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*“We haven’t seen anything like this in about 30 or 40 years at least”<sup>1</sup>.*

Speaking to the *Boston Globe*, Director of Transfusion Medicine Vishesh Chhibber underlined the unprecedented blood shortage that has plagued University of Massachusetts Memorial Health and the United States more broadly. With patients eager to schedule elective surgeries postponed due to COVID-19 restrictions, demand for blood has skyrocketed while supply has hurtled to critically low levels such that hospitals are preparing contingency plans to limit operations and further delay procedures<sup>1</sup>. This shortage has drawn renewed attention to the barriers to blood donation, particularly among racial and ethnic minority communities who have historically been underrepresented in the global blood supply<sup>2</sup>. In fact, in the U.S., Black individuals represent only 4.9% of blood donations but approximately 13% of the U.S. population<sup>3</sup>. As new waves of infection and the spread of COVID-19 variants further hinder efforts to resolve the global blood supply shortage, it is imperative to review barriers to donation in the context of the pandemic and consider how strategies utilised to promote COVID-19 vaccination might be translated to blood donation.

The blood supply shortage is partially a product of emergency public health measures, which resulted in the closures of common blood drive locations, such as schools and businesses, as blood donor turnout is closely correlated with accessibility to donation centers and events<sup>4</sup>. Notably, these closures have exacerbated disparities in the geographical accessibility of blood donation. In the U.S., sparse donation clinics and remaining blood drives are primarily concentrated in majority-White, suburban areas; consequently, many potential racial and ethnic minority donors must wade through a sea of inconvenient collection locations that can be expensive, both financially and temporally, to access<sup>5</sup>. Geographical inconvenience and the time-consuming blood collection process are cited as common deterrents to donation, and such inaccessibility can impede even the most determined of hopeful donors<sup>6</sup>. For instance, we spoke to a single mother of two who hoped to donate blood in response to commercials underlining the necessity of Black donors. The clinic was a 10-minute detour from her typical commute, but if she left work five minutes early, cut her time grocery shopping to 20 minutes, and avoided the post-work traffic that added at least 12 minutes to her travel time, she would have 50 minutes for the appointment and still have enough time to pick up her children from the community center. After calling the donation clinic, the receptionist informed her she needed to allocate at least an hour –10 more minutes– for the appointment. Unfortunately, it was an extra 10 minutes she simply did not have.

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External barriers of access are compounded by internal barriers among minority communities who may distrust the medical establishment due to various historical traumas<sup>7</sup>. For instance, 600 Black men in the U.S. Tuskegee Syphilis Study (1932-1972) were told by researchers that they were being treated for “bad blood” when they were instead being observed to understand the progression of untreated syphilis. The study is a representative example of a long history of medical racism and has contributed to continuing fears of medical abuse. Its nominal association with blood collection thus serves as one explanation for the finding that Black Americans are less willing to donate blood than White Americans<sup>8</sup>. Indeed, a paucity of trust in the health care system among Black Americans has been identified as a significant deterrent for blood donation, so any effort to increase donation rates among racial and ethnic minority communities must seek to bolster trust<sup>9</sup>. Recent times have spotlighted long-standing health disparities, and the need to prioritize inclusive blood donation with accessibility and trust has emerged as an important front in the struggle for equity<sup>2</sup>. In a 2019 systematic review, Makin and colleagues identify three primary reasons to advocate for greater inclusivity within blood supply systems<sup>10</sup>. First, without a sufficiently diverse donor pool, racial and ethnic minorities may be without type-matched blood, which jeopardizes care for patients with conditions such as sickle cell anemia and increases their risk of alloimmunisation. Furthermore, as global demographics project toward a higher proportion of ethnic minorities, proactively prioritising diversity within blood supply systems is paramount to ensure the sustainability of the enterprise. Finally, existing research suggests that participating in blood donation facilitates the integration of ethno-racial minority communities into healthcare systems, which thereby contributes to reduced disparities and medical distrust<sup>11</sup>. Inclusivity in blood donation provides a bridge towards inclusivity in medicine more broadly.

Strategies to promote such inclusivity may lie in the lessons learned from the COVID-19 pandemic<sup>12</sup>. The connections between COVID-19 and blood collection are unavoidable, from the closure of donation clinics for infection control to the recent increase in blood demand due to surgeries delayed due to the pandemic. To support blood banks that experience critical shortages, hospitals

in India have even launched a “give blood, get COVID vaccine” initiative, underlining how the two concerns have been inextricably linked<sup>13</sup>. As such, the context of the COVID-19 pandemic offers innovative solutions that can be applied to blood donation practices globally, such as combating health engagement hesitancy among minority communities<sup>14</sup>. In the U.S. and Europe, vaccines were initially available only in large medical centers and mass vaccination sites with an appointment, which were shown to lead to disparities in vaccination rates<sup>15</sup>; the rollout has since shifted towards smaller centers with more flexible walk-in options<sup>16</sup>. Indeed, from hair salons to dollar stores, vaccination centers have shifted dramatically to tackle the “last mile” access problem and meet racial and ethnic minority populations where they are. Beyond accessibility, expanding resources to local healthcare providers, who can uniquely listen to local community concerns, counter misinformation, and build trust, has emerged as a potent tool against health engagement hesitancy in minority communities<sup>14</sup>.

By necessity, our vaccine efforts have evolved to become more targeted and culturally competent; our blood collection efforts should parallel this progression. From a lack of access to distrust in medical institutions, the factors that underlie vaccine hesitancy and blood donation hesitancy, as well as the solutions to both problems, are much the same. Already, the American Red Cross has partnered with large grocery chains, such as Whole Foods Market, to offer more accessible blood donation appointments and combat recent supply shortages<sup>17</sup>. As with the vaccination rollout, further expanding blood collection to locally based, minority-owned organisations, such as barbershops and churches, would bridge concerns of accessibility through forums of camaraderie, familiarity, and trust. Indeed, it has been shown that community involvement and investment is a key motivator for blood donation, particularly among potential minority donors<sup>6</sup>.

Another COVID-related strategy lies in minority scientists, such as Dr. Kizzmekia Corbett who helped develop the Moderna vaccine, coming to the forefront of outreach efforts to combat health engagement hesitancy. Previous blood donation initiatives underscore the need for racial concordance in health practitioner-led outreach to ensure public health messaging is effectively and

equitably received<sup>18</sup>. When the New York State Health Foundation sponsored an innovative community-oriented program, which brought minority health education professionals to local churches, colleges, and community centers, the proportion of Black donors increased by 34%, and program participants reported feeling more equipped to learn useful health information<sup>19</sup>. Current efforts to combat vaccine hesitancy among minority communities pave the way for similar strategies toward more inclusive blood donation.

The emergence of the more infectious COVID-19 Delta variant, as well as low vaccination rates throughout the developing world, ensures that the challenges faced by blood supply systems during the pandemic are likely to persist. The energy and creativity channeled within recent vaccination initiatives provide a template for blood collection and donation practices. Deconstructing the long-standing barriers that impede potential donors, especially those among racial and ethnic minority communities, is critical to ensuring a sustainable and inclusive blood supply.

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