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Letter to the Editor

Dwindling blood reserves: An ominous downside of COVID-19 pandemic

1. To the Editor,

Since the outbreak of the novel coronavirus disease (COVID-19), immense fear, confusion, and uncertainty have disrupted lives. Despite years of planning to combat a future pandemic, including health care and community operations, nations have failed to contain the newly emerging virus as seen by the rapidly rising cases and death toll. A lot has been said and written regarding the shortage of drugs and personal protective equipment; however, little has been heard regarding a potential life-threatening drawback: the shortage of blood donations.

Transfusion therapy is an integral part of clinical practice, both saving lives in emergent settings as well as being the sole treatment option for many chronically ill individuals. In the setting of trauma, major surgeries, organ transplants, complicated malignancies, postpartum hemorrhage, and blood disorders such as thalassemia, hemophilia, and sickle cell anemia, blood transfusions carry significant importance. Unfortunately, data from previous outbreaks demonstrates that such pandemics may have an unfavorable impact on blood donation and utilization [1]. Thus, a safe and reliable reserve of blood is necessary, even in the face of widespread illness. Currently, the rapidly spreading COVID-19 has brought about unprecedented challenges in maintaining blood reserves, as community and hospital activities have switched from their usual to more pandemic-oriented operations [2]. According to health professionals, voluntary blood donation by the healthy group of the population has fallen drastically. Nearly 4000 planned blood drives have been canceled in the United States due to closure of workplaces and schools where such drives were previously held, resulting in declining blood reserves. Thus, as the COVID-19 cases continue to rise, there is a global concern about the dwindling blood supplies to meet the needs of the patient population [3,4]. Acute blood shortage has led hospitals across the world to cancel elective surgeries to preserve their supplies [5]. Consequently, this adds to our concern by putting at risk those patients whose lives are dependent on regular transfusions. Thus, it is vital to address the said issue, identify the factors involved and resolve them at the earliest to achieve a healthy community.

We believe that the key reason for diminishing blood reserves is the country-wide lockdown that has led to uncertainty, fear, and hysteria among the masses. Though necessary, mobility restriction secondary to undue confinement is a major concern. The curbs, therefore, have impeded the movement of blood donors resulting in a substantial decrease in the number of potential donors [3]. In these precarious times when people are suffering from a dearth of necessities coupled with the diminishing finances and restricted social interactions, it is not surprising that people overlook the need for blood donation that helps save the lives of those dependent on them. Thus, given the importance of blood donation and the adverse effect of containment strategies on it, a meticulous plan by the government in collaboration with the health care associations should be devised at the earliest. We, as health care professionals, would like to emphasize the use of telehealth systems to carry out blood drives effectively amid the pandemic. This will urge more people to participate in donation campaigns by simply making calls to the concerned entities. Moreover, considering restricted-mobility, staff from various collection units should provide door-to-door services so that the donors can have easy access within the comfort of their homes.

Furthermore, ignorance and misapprehensions about the transmission of COVID-19 by blood and its components is another hurdle that has led to a decline in blood donations and thus warrants immediate attention. To date, no evidence has been found to support the basis of 2019-nCoV infection as a transfusion-transmission disease. Although the risk of transmission of the respiratory virus via blood transfusions needs to be considered in extreme cases with a very high viral load [6], it is unlikely that such a donor will be healthy enough to donate blood. Even though it is impossible to ignore this theoretical risk, the likelihood of such an occurrence is extremely low. The Food and Drug Administration (FDA), the Centers for Disease Control and Prevention (CDC), and the American Association of Blood Banks (AABB) have not given any recommendations for blood establishments; however, they have suggested that blood collection establishments may choose voluntary interventions as a precaution [7,8]. This will help encourage donors who are concerned about their safety and also that of others. Dissemination of accurate information regarding COVID-19 and its mode of transmission is the key solution to this dilemma. Therefore, public awareness campaigns emphasizing the importance of maintaining sufficient blood supplies and the dire need for donors amidst a pandemic should be effectively portrayed through electronic and print media.

https://doi.org/10.1016/j.transci.2020.102818
Received 7 May 2020
Available online 21 May 2020
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Another issue that we would like to shed light upon is the attitude of individuals toward blood donation centers during the pandemic. Perception of donors regarding hospital and blood donation center visits are polluted with thoughts of possible infection risk in these setups, that discourages them from donating blood. Thus, health practitioners and policymakers should take necessary steps to facilitate safe and easy blood donation by practicing social distancing, enhancing their disinfecting procedures and donning protective gear. The Red Cross has implemented new protocols to minimize any possible risk of transmission by spacing out appointments and making donors sit six feet apart while waiting for their turn to donate blood. They have also taken measures to sanitize anything that comes into contact with humans. Moreover, regular temperature checks of the staff and donors strengthen their strategy to mitigate a possible infection risk [4,5].

In such times of crisis, most medical attention is diverted to those afflicted with physical ramifications of the coronavirus. Even though it is imperative to do so, it is also essential that those suffering from preexisting medical conditions, for example, thalassemia patients whose lives are heavily dependent on blood donations, are given their due treatment. Keeping in mind the necessity of blood donations and the challenges we are facing in this COVID-19 pandemic, it is pivotal that the culture of voluntary blood donation must not break. Part of the population who are healthy enough must not forget their responsibility toward those who are diseased and need blood or its components.

Sojka BN, et al. describe the motives of a blood donor in their article [9]. The results indicated that altruism was the main driving force that leads to blood donation decisions. The other factors involved were media appeals and the influence of friends and related people. Thus, we suggest using the same strategy to motivate individuals to donate blood. In today’s world media is the prime source of information among the people. Utilization of this resource to its maximum by updating people about the latest COVID-19 research may address their confusion and help raise awareness. Media should also ensure the public regarding the safety of blood donations, by alleviating any misconceptions withholding them from donating blood. This will encourage donor participation. Blood collecting organizations and centers must devise plans to procure blood in this lockdown through ways that involve minimum donor exposure. For instance, in nations with isolated population groups, it is possible to set blood drives in areas where the pandemic infection has not infiltrated yet or might take longer to reach. Blood banks and hospitals must institute all the safety protocols to attenuate the risk of infection spread to the donors and the staff. The government should also aid by providing additional resources to carry out blood drives. Implementation of such interventions to sustain blood supply must be our utmost priority as we fear that with an entire emphasis on the mitigation of COVID-19, negligence in other areas can lead to broader health risks.

Funding

No funding sources to declare.

Ethical approval and consent to participate

This study requires no ethics approval due to public data-based analysis. The authors are accountable for all aspects of the work in ensuring that the question related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Consent for publication

Not applicable.

Human Participants and animal rights

This article does not contain any studies with human participants or animals performed by any of the authors.

Availability of data and materials

The datasets supporting the conclusion of this article are included within the article.

Authors’ contribution

Sohail Kumar contributed the conception of the work, did literature search, drafted the initial manuscript, and agree to be accountable for all aspects in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Dua Azim did literature search, drafted the initial manuscript, and agree to be accountable for all aspects in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Sundus Nasim and Shariq Haider Hashmi revised the manuscript for important intellectual content, approved the final version of the manuscript, and agree to be accountable for all aspects in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Declaration of Competing Interest

The authors declare they have no conflict of interest.

Acknowledgements

Not applicable

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