

COVID-19 Pandemic and Blood Donation Services: Perspective of Low-Resource Country

Ahmed M. Abbas, MD*¹, Shymaa S. Ali, MD²

¹Department of Obstetrics & Gynecology, Faculty of Medicine, Assiut University, Egypt.

²Department of Obstetrics & Gynecology, Faculty of Medicine, Suez University, Egypt.

***Corresponding Author:** Dr. Ahmed M. A. Sobh, MD, Department of Obstetrics and Gynecology, Assiut University, Egypt, Women Health Hospital, 71511, Assiut Egypt.

Short Communication

In March 2020, the World Health Organization considered coronavirus disease-2019 (COVID-19) as a worldwide pandemic.¹ The provision of a continuous supply of safe blood and blood components is an essential issue especially in low-resource countries as Egypt with a high rate of obstetric hemorrhage.² However, there are situations in which either the supply of blood may be affected, or the safety of the blood supply may be compromised as in the event of COVID-19 pandemic.³

The considerable decline in blood donation services could be attributed to the unavailability of blood donors, interruption in the process of standard blood collection systems, or both. Blood donation is adversely affected as blood donors become ill or have less time to donate because of work commitments, quarantine, lockdown, or the need to care for others. Additionally, donors may be hesitant to attend blood donation sessions for fear of being infected. Moreover, organizations may be disinclined to organize blood drives as part of measures to prevent the gathering of people and virus transmission in the community.⁴ Therefore, blood services should consider the sufficiency risk early to be ready, and blood donation numbers should be closely monitored, so that measures can be taken rapidly to precede any shortage in donor attendance.

The risk of transmission of COVID-19 through blood transfusion is believed to be extremely low.⁵ However; there are no

published studies of the transmission of SARS-CoV-2 infection by blood transfusion in humans or animal models. The possibility of transmission should only be considered if the blood donor is viraemic with a high viral load.⁶ Precautions to diminish the risk of infection should include donor education, deferral of at-risk donors, quarantine of blood components, retrieval of in-date products based on a report of post-donation illness in the donor, and screening of donations using laboratory tests.⁵

The following suggestions may be considered in low-resource countries to avoid the expected shortage in blood supply during the COVID-19 pandemic. We started to implement those measures effectively since the onset of lockdown in Egypt. Blood services continually assess their blood stocks carefully, elective surgeries for non-malignant conditions were stopped, active public awareness campaigns on the importance of maintaining an adequate blood supply were initiated, need for blood donors and safety of the donation process was disseminated continuously, providing donor transportation from villages and district areas, increasing efforts to schedule appointments for donations and adjusting operating hours in blood banks. Moreover, ensuring the safety of the donation process through the use of protective measures by health care workers, such as hand hygiene and face masks. The use of Telehealth-based care through the Whatsapp messenger and Face book groups to communicate with volunteer blood donors, especially those with rare blood groups. Finally, the

reduction of whole blood donation intervals for non-anemic donors who can tolerate more frequent donations.

References

- [1] Cucinotta D, Vanelli M. WHO Declares COVID-19 a Pandemic. *Acta bio-medica: Atenei Parmensis*. 2020; **91**: 157.
- [2] Wang H, Naghavi M, Allen C, et al. Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet*. 2016; **388**: 1459-1544.
- [3] World Health Organization. Protecting the blood supply during infectious disease outbreaks: guidance for national blood services. 2019.
- [4] Blietz J, FitzGerald WP, Sylvester RD: Disaster management; in JD Roback, MR Combs, BJ Grossman, CD Hillyer (eds): *AABB Technical Manual*, pp 103– 135, 16th edn., Bethesda, MD, AABB, 2008.
- [5] Maintaining a safe and adequate blood supply during the pandemic outbreak of coronavirus disease (COVID-19) – Interim guidance. World Health Organization. 2020.
- [6] Blut A. Influenza virus. *Transfus Med Hemother*. 2009; **36** : 32.

Citation: Ahmed M. Abbas & Shymaa S. Ali., (2021), "COVID-19 Pandemic and Blood Donation Services: Perspective of Low-Resource Country", *Arch Health Sci*; 5(1): 1-2.

DOI: 10.31829/2641-7456/ahs2021-5(1)-013

Copyright: © 2021 Ahmed M. Abbas & Shymaa S. Ali, This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.