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COVID-19 Pandemic. Urgent need for increased blood donor campaigns to raise awareness on blood donation in the midst of Social Distancing.Erhabor Osaro¹, Erhabor Tosan², Adias Teddy Charles³, Erhabor, U⁴.Blood Transfusion Faculty West African Postgraduate College of Medical Laboratory Science¹, Medical Laboratory Science Council of Nigeria², Haematology Faculty West African Postgraduate College of Medical Laboratory Science³, Applied Public Health Department, School of Community Health and Midwifery, University of Central Lancashire, Preston, UK⁴.*Author for Correspondence: n_osaro@yahoo.com/+44-793-236-3217/+234-813-962-5990***Summary**

Voluntary non-remunerated donation of blood out of altruism saves millions of lives daily across the globe. The outbreak of SAR-COV-2 the virus responsible for COVID-19 which was first discovered in Jianghan District, Wuhan, Hubei province in China in 2019 and the declaration of the outbreak as a pandemic by WHO on the 11th March 2020 has generated a number of challenges including the provision of safe and adequate supply of blood and blood products (American Association of Blood Banks, 2019). To help reduce the transmission of the virus, social distancing measures requiring that people stay at least 1 metre apart have been put in place in most countries to reduce social interaction between people. These measures have the potential to reduce the supply of blood and blood components. There is the urgent need for blood transfusion services across the globe to put measures in place and take actioned planned steps (World Health Organization, 2019). This is to facilitate an evidence-based assessment and planning to ensure appropriate response to ensure blood supply sufficiency and unhindered delivery of safe blood and blood products to support patients including those with COVID-19 presenting with severe sepsis and hypoxaemia requiring extracorporeal membrane oxygenation (Gehrie et al., 2020; Shan et al., 2004).

There is need for increased awareness, campaigns and dissemination of accurate information to facilitate increased blood donation and reduce the misconception and fears that people have about donating blood during

this COVID-19 era (Yahia, 2020). The following are scientifically proven facts about blood donation and COVID-19;

1. SAR-COV-2 the virus that causes COVID-19 is primarily transmitted by the respiratory route.
2. Evidenced-based data has shown that respiratory viruses are not transmitted through the transfusion of blood and blood components.
3. The risk of possible SAS-COV-2 transmission via the transfusion of blood and products is essentially theoretical and likely extremely minimal.
4. The potential risk of transmission of SAS-COV-2 by transfusion of blood collected from asymptomatic SARS-COV-2 infected person is essentially theoretical.
5. There is no scientific evidence to justify the testing of the blood donors for COVID-19 particularly in the absence of and reported cases of transfusion-transmissible COVID-19.
6. Use of pathogen reduction technologies (PRTs) has been shown to be effective against the SARS and MERS virus in plasma and platelets. It may possibly be effective against SAR-COV-2. It is however not be cost effective due to associated significant cost and logistic implications associated with its implementation (WHO, 2020).
7. There is need to heighten the haemovigilance radar across the globe to facilitate the prompt reporting of any possible cases of transmission through blood and blood products (WHO, 2016).

Universal precautionary measures and processes should be put in place to ensure the safety of the entire blood donation process (WHO, 2004). Appropriate personal protective equipment must be available for both blood transfusion service staff and blood donors to prevent the transmission including the strict implementation of social distancing rules (National Health Commission of the People's Republic of China, 2020; Chinese Society of Blood Transfusion, 2019). To ensure that blood supplies are safe and effective, the following best practices could be implemented to potentially reduce the risk of potentially collecting blood from blood donors who are potentially infected with SAR-COV-2.

1. There is need for continuing donor education highlighting the need for blood donors to self-defer if they feel unwell and presenting with COVID-19 related symptoms (cough, short of breath and temperature $\geq 37.8^{\circ}\text{c}$).
2. Potential blood donors who have fully recovered from a confirmed COVID-19, those who have had direct exposure to COVID-19 patient and those arriving from countries with an active and ongoing case of community transmission of the virus should be deferred for at least 28 days.

The outbreak of the COVID-19 and associated implementation of social distancing, lockdown and restrictions on public transport to prevent the spread of the virus has significantly affected the ability to get life saving medications and blood supplies to hospitals and patients. In Rwanda and Ghana, the US-based Zipline are innovatively using drones to deliver blood and medical supplies to rural medical clinics in the midst of the Covid pandemic (David DiGregorio, 2020).

Measures must be put in place to ensure the adequate and safe supplies of blood during and after the COVID-19 pandemic (Yahia, 2020). There is need to ensure the stockpiling of vital supply of critical materials and equipment required for blood and blood products collection and laboratory testing (including reagents, consumables and PPE). Blood services across the globe to put in place emergency response plans to manage the reduction of blood and blood products that may likely to occur during and after

the COVID-19 outbreak ensuring the maintenance and availability of adequate and safe supply of blood and blood products.

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