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Editorial

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Voluntary Unpaid Plasma Donation

Ali Akbar Pourfathollah[1], Karim Shamsasenjan[2], Mahmoud Hadipour Dehshal[3]

[1]Department of Immunology, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran
[2]Hematology and Oncology Research Center, Tabriz University of Medical Sciences, Tabriz, Iran
[3]Mehregan Pharmacy, Tehran, Iran

Corresponding Author: Ali Akbar Pourfathollah, Department of Immunology, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran
E-mail: pourfa@yahoo.com

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We have read the article by Mohammadi et al. (Source Plasma Donation: The Experience of the Iranian Blood Transfusion Organization. Int J Hematol Oncol Stem Cell Res. 2022; 16(3):151-156).

It has been claimed that voluntary source plasma donation has led to a decrease in the number of whole blood donations. For evidence, they segregate and collect just the data of 16 comprehensive donor centers and exclude the other blood centers in Iran to prove the lowering rate of blood collection. However, the decrease in the number of blood collections in the latter centers was mitigated by efforts in other blood centers; as a result, the number of blood collections in Iran was kept steady at about 2,100,000 units [10].

The emphasis on collecting of paid plasma as the final solution of plasma supply for plasma-derived drugs is contrary to the general ethical approach trusted by experts worldwide. The authors did not mention the reasons why other European countries avoid initiating paid plasma collection. I invite them to see "Plasma Shortage in Europe: Proper investment on public blood establishments is the answer, not undermining ethical principles"[6] and "Revision of the EU legislation on blood, tissues and cells"[7]. The authors should tell us why IBTO should not follow WHO guidelines that emphasize unpaid voluntary donation; IBTO, as part of the Islamic Republic of Iran's Ministry of Health, should abide by the principles stated by WHO. They should also explain why other countries in Europe and Australia, except for five countries, do not accept paid plasma. The guidelines and directives clearly emphasize voluntary unpaid plasma collections[9]. They are making efforts based on the voluntary system of plasmapheresis to expand the capacity to ensure adequate plasma[5,4].

The authors have stated "seven centers began to collect plasma…policies focused on increasing plasma donation statistics for the increase of plasma- derived medicinal products" that requires further explanation. The unpaid voluntary source plasmapheresis program from the beginning and similarly in 2017 aimed to ensure plasma-derived medicines prepared from Iranian source[1]; it complied with the policy of the Islamic Republic of Iran's Ministry of Health to reach self-sufficiency in PDMPs [2]. This strategic policy was materialized stepwise at four stages of feasibility studies: implementation, pilot production, authorization by the counterpart fractionator for licensed contract fractionation, and the final production stage. Here is the point the article seems flawed. The authors have collected and analyzed the data of the donor centers

without considering at what stage each center has been during data collection; there has not been any stage-wise data collection. The misaligned data could not be then collected, as it would lead to data analysis errors. For example, comparing the number of whole blood collections in donor centers with the number of apheresis plasma donations while the relevant centers have been at separate (aforementioned) stages is wrong and scientifically unacceptable, particularly considering the fact that donor centers were running independently on a gradual basis and were planned to run at different timetables.

Regarding data collection, "…plasmapheresis data related to 16 centers obtained from IBTO software…", there are major flaws in the article. The general policy issued by IBTO for blood availability in the country is planned based on the nationwide blood distribution system[3]. The mission of all blood centers in Iran is fulfilled based on the road map designed by IBTO in order to ensure hospital demand for blood components, apheresis platelets, and stem cell registry. The policy, whose materialization is compulsory, is communicated to all blood centers at the beginning of each year. These imperative policies are communicated as operational pieces, and any outer activities are considered as non-compliance. Therefore, it would be scientifically unsound to make any comparisons for whole blood, voluntary plasma, or infectious markers without any reference to these operational pieces. It is baseless to compare whole blood collections with apheresis plasma donations at a given center, without reference to the approved communicated policy. The claim stems from the lack of authors' awareness about the IBTO operation or from their intentionally overlooking this principle to deduce their biased conclusion.

The authors offered an odd solution asserting, "Therefore IBTO decided to stop the project and focus on its main role to prepare safe and sufficient blood components through WB collection and also single donor platelet and concurrent plasma by plateletpheresis". They have ignored that the concurrent plasma strategy does not fulfill the goal of plasma increment because instead of two gold units of apheresis platelet, one platelet and one plasma unit are manufactured. Moreover, the value of platelet units is much more than plasma. In the Islamic Republic of Iran with an annual platelet demand growth of 5% and the 15-time higher cost of plateletpheresis compared with plasmapheresis, the authors' solution looks weird[8].

REFERENCES

1. Chegini A, Torab SA, Pourfatollah AA. A successful experience of the Iranian blood transfusion organization in improving accessibility and affordability of plasma derived medicine. Transfus Apher Sci. 2017;56(1):12-16.

2. Cheraghali AM, Amini-Kafiabad S, Amirizadeh N, et al. Iran National Blood Transfusion Policy; Goals, Objectives and Milestones for 2011-2015. IJBC. 2011; 3(2): 35-42.

3. Cheraghali AM, Abolghasemi H. Plasma fractionation, a useful means to improve national transfusion system and blood safety: Iran experience. Haemophilia. 2009;15(2):487-93.

4. Kluszczynski T, Rohr S, Ernst R. White paper, Key Economic and Value Considerations for Plasma-Derived Medicinal Products (PDMPs) in Europe, 2020. Accessed from: https://health.ec.europa.eu/system/files/2016-11/20150408_cc_report_en_0.pdf.

5. Pant S, Baga R, McGill S. International Plasma Collection Practices: Project Report. CADTH. 2021;12(1): 1-38. Accessed from: https://canjhealthtechnol.ca/index.php/cjht/article/view

6. Plasma Shortage in Europe: Proper Investment in public blood establishments is the answer, not undermining ethical principles. EBA. Accessed August 2022. https://europeanbloodalliance.eu/plasma-shortage-in-europe-proper-investment-in-public-blood-establishments-is-the-answer-not-undermining-ethical-principles.

7. Revision of the EU legislation on blood, tissues and cells. Accessed August 2022 https://health.ec.europa.eu/blood-tissues-cells-and-organs/overview/revision-eu-legislation-blood-tissues-and-cells_en.

8. Stubbs JR, Shaz BH, Vassallo RR, et al. Expanding the platelet inventory to mitigate the impact of severe shortages. Hematology Am Soc Hematol Educ Program. 2022(1): 424-429.

9. World Health Organization. (2021). Guidance on increasing supplies of plasma-derived medicinal products in low- and middle-income countries through fractionation of domestic plasma. World Health Organization. https://apps.who.int/iris/handle/10665/340171.

10. World Health Organization. Regional Office for the Eastern Mediterranean. (2017). Regional status report on blood safety and availability 2016. World Health Organization. Regional Office for the Eastern Mediterranean. https://apps.who.int/iris/handle/10665/258923.