

## Thank you for saving my life: Blood donation matters

Sir,

Globally, blood transfusion has played an indispensable role in not only saving the lives, but even in improving the health standards of millions of people.<sup>[1]</sup> In fact, the recent estimates released by the World Health Organization (WHO) suggest that every year close to 108 million units of donated blood are collected worldwide, of which more than 50% are reported in high-income nations (which is home to only 18% of the world's population).<sup>[2]</sup> Further, it has been observed that the median blood donation rate per 1000 people in high, middle, and low income nations was 36.8, 11.7, and 3.9, respectively.<sup>[2]</sup> This indirectly reflects that even now many individuals from both rural and urban settings residing in the middle and low income nations (especially WHO's African region) are dying primarily because of the absence of timely access to safe blood.<sup>[2,3]</sup>

Although, indications for blood transfusion are multiple, and variable, nevertheless, it is being primarily used among elderly (almost 75% transfusions) for providing supportive care in surgeries (in developed nations), and for the management of morbidities in under-five children (around 65% transfusions), pregnancy-related complications, and trauma (in low and middle income nations).<sup>[2,3]</sup> Further, despite the existence of mandatory recommendation for screening the blood for HIV, hepatitis B virus (HBV), hepatitis C virus (HCV) and syphilis before transfusion, almost 25 nations have shown irregularities (because of logistics constraints, shortage in staff, availability of poor quality test kits, poor infrastructure in laboratories, and the absence of monitoring by external agencies, etc.).<sup>[2]</sup> Thus, the prevalence of transfusion-associated HIV, HBV, and HCV infections in the year 2012 has been estimated as 0.002%, 0.02%, and 0.02%, respectively, (in high income nations), in contrast to the higher estimates of 0.85%, 3.59%, and 1.07% in the low income nations.<sup>[2,3]</sup>

Moreover, among the three types of available blood donors—voluntary unpaid, family/replacement, and paid, it has been advocated for years together that an adequate and sustainable supply of safe blood can only be ensured by maintaining a stable base of regular, voluntary, and unpaid blood donors.<sup>[1,2]</sup> In-fact, these

voluntary unpaid donors have the least possible risk of blood-borne infections and thus it is very crucial that the same should be encouraged in each nation in order to achieve the ultimate aim of self-sufficiency.<sup>[2,4]</sup> The estimates for the year 2012 revealed that voluntary unpaid donors contributed towards 100% of blood supplies in 60 nations, while in another 72 nations its percentage was even less than 50% (and remaining being obtained from the family/replacement and paid donors).<sup>[2,3]</sup> Multiple determinants like never being approached by health workers; associated myths and misconceptions — risk of acquiring HIV infection during blood donation or it will result in weakness; socioeconomic class; literacy status, etc., have been identified among health professionals and the general population, which are interfering with the practice of voluntary blood donation.<sup>[5-7]</sup> However, encouraging results have been observed with regard to voluntary blood donation in low and middle income nations, with maximum improvement being observed in South-East Asia and African regions.<sup>[3]</sup> Nevertheless, intense efforts are still needed to further improve its percentage as almost 25 nations reported paid blood donations in the year 2012.<sup>[3]</sup>

In order to globally accomplish the goal of WHO to ensure obtaining all blood supplies from voluntary unpaid donors by the year 2020, it is recommended that all the activities related to blood donation are executed according to the national blood policy, and coordinated at the national level by an earmarked agency and integrated network of blood supply.<sup>[2]</sup> At the same time, it is very much important to address the identified determinants which are negatively affecting voluntary blood donation.<sup>[3,5-7]</sup> Further, it is also important to facilitate quality-assured screening of all donated blood for transfusion-transmissible infections and even encourage rational use of them to avert the risk associated with unnecessary transfusions.<sup>[2]</sup> In addition, creating awareness among both regular donors and those who have never donated blood to donate blood freely and frequently is essential.<sup>[4]</sup> However, it is even more important to acknowledge the contribution of those people who have donated blood voluntarily in the past so that they continue to do so even in the future.<sup>[4]</sup>

In conclusion, provision of safe and adequate blood through the practice of voluntary blood donation should be acknowledged as a public health priority among all the nations, especially in middle and low income nations.

### Financial support and sponsorship

Nil.

**Conflicts of interest**

There are no conflicts of interest.

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**REFERENCES**

1. Alfouzan N. Knowledge, attitudes, and motivations towards blood donation among King Abdulaziz Medical City Population. *Int J Family Med* 2014;2014:539670.
2. World Health Organization. 10 Facts on Blood Transfusion; 2014. Available from: [http://www.who.int/features/factfiles/blood\\_transfusion/en/](http://www.who.int/features/factfiles/blood_transfusion/en/). [Last accessed on 2015 May 22].
3. World Health Organization. Blood Safety and Availability- Fact Sheet No. 279; 2014. Available from: <http://www.who.int/mediacentre/factsheets/fs279/en/>. [Last accessed on 2015 Jun 05].
4. World Health Organization. World Blood Donor Day 2015: Thank You for Saving My Life; 2015. Available from: <http://www.who.int/campaigns/world-blood-donor-day/2015/event/en/>. [Last accessed on 2015 Jun 05].

5. Agasa SB, Likwela JL. Barriers to voluntary blood donation in the population of Kisangani in the Democratic Republic of Congo. *Pan Afr Med J* 2014;17:306.
6. Kowsalya V, Vijayakumar R, Chidambaram R, Srikumar R, Reddy EP, Latha S, *et al.* A study on knowledge, attitude and practice regarding voluntary blood donation among medical students in Puducherry, India. *Pak J Biol Sci* 2013;16:439-42.
7. Siromani U, Tsubaki T, Daniel D, Mammen JJ, Nair SC. Perspectives and attitudes to voluntary blood donation in a tertiary referral hospital blood bank. *Asian J Transfus Sci* 2013;7:158-9.

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**How to cite this article:** Shrivastava SR, Shrivastava PS, Ramasamy J. Thank you for saving my life: Blood donation matters. *J Res Med Sci* 2016;GF:GH