

Voluntary Non-Remunerated Blood Donations

The collection of blood from voluntary, non-remunerated blood donors (VNRBDs) is an important measure for ensuring the safety, quality, availability and accessibility of blood transfusions. The WHO recommends that all countries should be self-sufficient in all blood products and that every blood donation should be voluntary, anonymous and non-remunerated. World Health Assembly resolutions WHA 28.72 and WHA 58.13 urged Member States to develop national blood transfusion services based on voluntary non-remunerated blood donation. Most developed countries have well-functioning systems of non-remunerated blood donations. However, the developing countries including Pakistan have a very low VNRBD base with an estimated 10% voluntary donations. Within the system reform of the blood transfusion sector in Pakistan, it is foreseen as an essential component and the principle of VNRBD should be propagated. Therefore, one of the key components of the SBTP is the promotion of voluntary blood donations. Since its inception in 2010, the SBTP took concrete steps to improve the VNRBD scenario as enumerated below;

National Blood Policy and Strategic Framework

The SBTP formulated the National Blood Policy and Strategic Framework 2014-20, which provides fundamental principles and identifies clear priority areas to be pursued for attaining self-sufficiency in blood products in the country. The National Policy states *'Development, implementation, organisation and management of National Blood Transfusion Services able to meet blood demand of the country from voluntary non-remunerated blood donors in a manner that is safe, effective, equitable, non-profitable, sustainable, rational, without wastage and ensures the protection of donor and healthcare workers' rights and safety'*. In addition, in the Strategic Framework, the Cluster 3: *Core Business identifies donor management including community interface as a key priority area*. The development of a consensus document endorsed by all the provinces, regions and the federal government augurs well for the SBTP and provides a model for policy making in the post devolution era that can be emulated by the other devolved subjects also.

National Blood Donor Policy

With the objective of harmonization in donor management and ensuring blood safety, a national Donor Policy was developed for adoption by all institutions involved in blood collection. This policy document is based on national (to incorporate local requirements), regional (ECO countries) and international expertise (to provide expertise from international models) and was drafted by a working group of the First National VNRBD Workshop and later approved by the National Blood Transfusion Programme and endorsed by the National Steering Committee. The dissemination of the document covered the key governing institutions like National and Provincial Blood Transfusion Programmes and Blood Transfusion Authorities as well as Blood Donor Organizations (BDOs), most of which are working autonomously and without much regulation, some of them with a less than optimal registration.

The national strategy to promote VNRBD as outlined in the Policy aims to encourage the conversion of the vast population of 'Family Replacement Donors' into regular blood donors as many of these regular donors are suitable to become voluntary donors. But in the absence of a properly coordinated blood transfusion system, these donors are not sensitized to donate regularly on a voluntary basis and are thus lost. The national strategy proposes availing the opportunity of the onetime visit by the replacement donor to the blood centre for donating blood for his/her relative by providing them counseling and convincing them to return again as a

voluntary blood donor. The second strategy to increase reliance on VNRBDs is to strengthen the capacity of the blood centres and engage with voluntary Blood Donor Organizations (BDOs) operating in colleges and universities to yield their true potential. With proper coordination and capacity building, the true potential of these committed BDOs can be multifold increased. In addition to these two specific strategies, the national policy also proposes promoting general awareness about blood safety among the public.

Local KAP Survey (Qualitative)

In 2009, the SBTP through technical assistance of GIZ (German International Cooperation) conducted a small baseline survey in a small district of Rawalpindi which highlighted the local beliefs in Pakistan on voluntary blood donation. The research, conducted by Prof. Zubia Mumtaz from Alberta, explored the various and complex meanings embedded in blood using empirical ethnographic data from Pakistan, with the intent of informing development of a national blood policy. Using a focused ethnographic approach, data were collected in 26 in-depth interviews, 6 focus group discussions, 12 key informant interviews and 25 hours of observations in blood banks and maternity and surgical wards.

The key finding was that notions of caste-based purity of blood, together with the belief that donors and recipients are symbolically knitted in a kin relationship, place a preference on kin-blood. The anonymity inherent in current systems of blood extraction, storage and use as embedded in contemporary policy discourse and practice was problematic as it blurred distinctions that were important within this society. It was recommended that in order to ensure a safe blood supply, it is important to base blood procurement policies on local, context-specific belief systems rather than relying on uniform, one-size-fits-all global policies.

National KAP Survey (Quantitative)

One of the key strategies towards achieving the 100% VNRBD, in parallel with introducing governance through a well-implemented donor policy, was increasing awareness through a well-designed Public Awareness Campaign (PAC). In order to design an appropriate PAC, a nationwide KAP survey, assessing the knowledge, attitudes and practices of a multilayer, randomized sample of 3,000 respondents, was conducted in 2011, with support from and within the 'circumscription' of BDOs. The selection of BDOs, rather than the 'general public' for the KAP survey was in accordance with the planned selection of BDOs (potential donor communities) for the pretesting of PACs (especially in areas of low response).

BDO Inventory

In Pakistan, the transfusion services are being provided by the public, private and NGO/BDO sector blood banks, mostly hospital based. BDOs are mostly university based voluntary organizations managed by students. On the one hand, these organizations form the backbone of (voluntary) donor mobilization and blood collection in Pakistan. On the other hand, they are working independently, without an agreed governance or communication framework. The potential importance of BDOs in the BT system reform process, however, lies in the fact that they are collecting enormous quantities of (voluntary) blood donations through their donor motivation and mobilization programmes.

Though the existence of this kind of support organizations was already known yet nobody had gained an overview of the dimensions of their contributions, and since they functioned in isolation within their university environments, even they themselves were mostly unaware of their potential and importance at a national scale. BDOs from all parts of the country were contacted and the relevant data were collected in order to learn more about their existing

strategies and potentials. The information gathered was used for the elaboration of a 'First National Inventory of Blood Donor Organizations' published under the National Blood Transfusion Programme'. About 80 BDOs were identified in this inventory working independently and with variable functions.

BDO Networking

The SBTP established a network of BDOs in 2015 with the aim of interchanging experience and best practices, while on the other hand being open to policy advice from the national programme and joint strategies and actions for the promotion of blood donation and the advancement of blood safety. The partnership with the BDOs enables the public sector to benefit from quality, innovation and efficiencies. There are many modalities for cooperation such as the private sector BBs could act as "regional blood centers" both for public and private HBBs. The BDOs could be linked to RBCs and deliver blood directly to these centres rather than to individual hospitals/patients.

The BDO Association intends to develop close liaison with the IFBDO (International Federation of Blood Donor Organizations) which is the leading association constituting more than 70 countries. It is an international organization whose main stated aim is self-sufficiency of the member states in blood proceeding from voluntary non-remunerated blood donors, as well as harmonization of the security standards for blood donation and inspection processes. To develop the capacity and future strategy of PakBDO, the SBTP organized a series of three workshops for all the provinces in 2016. The workshops were supported by the WHO/OFID Joint Project (OPEC Fund for International Development). The activities were actively participated by the representatives of BDOs, large blood banks and provincial leadership of the SBTP.

International Experts

Peter Heimer, Consultant, German Red Cross, Germany: Mr. Heimer conducted two short term assignments in Pakistan in October and December 2010, and assessed the challenges and barriers regarding VNRBD. He developed communication strategies for donor recruitment/retention from low risk populations, donor information and education campaigns and materials for the target groups. He facilitated the first national VNRBD workshop (Dec 2010) and also supported SBTP in the formulation of national blood donor policy and creating a platform of blood donor organizations to share experiences and develop evidence based strategies to strengthen their programmes.

Ton (A) PM Los, Medical Sociologist, Sanquin Consulting Services, Amsterdam, Netherlands: Mr. Ton Los conducted two assignments in Pakistan with the objective to support the development of institutional capacity to design a needs based approach to VNRBD under the new blood donor policy. In his first mission, in coordination with SBTP, the expert visited various blood donor organizations and social science faculties to assess the existing potential as well as capacity development requirements. He conducted a nationwide KAP survey with a sample size of 22 BDOs. In his second mission, the expert supported SBTP in the analysis of the results of the KAP survey. Main output was the profiling of donors and non-donors. The results of the survey were presented in the second national VNRND workshop held in Dec 2011 in Islamabad.

Prof. Wim de Kort, Professor of Donor Healthcare, University of Groningen, Netherlands: Prof. Wim facilitated the conduction of a first national workshop on blood donor management through the support from WHO EMR office.

Eberhart Lars, Head of Donor Management, Austrian Red Cross/Blood Center for Vienna, Austria: Mr. Lars facilitated the conduction of a first national workshop on blood donor management through the support from WHO EMR office.

Public Awareness Campaign

The recruitment of safe donors is a challenging task and the first step is to have a comprehensive voluntary blood donation programme with special emphasis on campaigns targeting young people. Building a sustainable base of safe blood donors needs a long-term approach that requires not only the establishment of an effective voluntary blood donor programme but also improved public awareness and acceptance of the importance of blood donation as a social norm. It is emphasized in the PACs that blood and blood products are a unique and precious national resource as they are obtainable only from individuals who donate blood or its components.

To promote the concept of VNRBD in the country, the SBTP through the FC component (KfW funded), hired two firms to develop video documentaries and design material for promotion and motivation of voluntary non-remunerated blood donors. The documentaries and videos highlight the significance of VNRBDs for the benefit of the policy makers, potential partners, international and national donors, public/private organizations leadership, NGOs/BDOs, philanthropist, general public and also act as a tool for disseminating information regarding the need and importance of safe blood transfusion in Pakistan. The material is telecasted on websites, TV channels, local cable networks, projectors, RBCs waiting area, mobile blood camps in university/offices /factories etc.

The various Documentaries and Video spots developed cover the key components of the Programme. They include clips highlighting the status of blood transfusion services in Pakistan; areas where the mortality is very high due to disease burden and requiring frequent blood transfusions, the benefits of the replacement verses voluntary blood donors, demonstrations of blood drives and campaigns, safety in using blood components against the present practice of transfusing whole blood, and children in particular with regard to thalassaemia, blood cancers and the current challenges. The Phase I regional blood centres in all provinces and the modern equipment installed therein is visibly filmed. Interviews of professionals, community members and safe blood transfusion manager and technical staff are incorporated as an important means to communicate the key messages.

World Blood Donor Day Celebrations

Thanks to the sustained efforts of the SBTP the World Blood Donor Day (WBDD) is now extensively celebrated all over the country in the month of June. Since 2009, the Day is enthusiastically celebrated across Pakistan and the impact of these celebrations has resulted in increasing awareness about voluntary blood donations. The WBDD activities are receiving more and more coverage in the electronic and print media which is a reflection of the sustained and committed efforts of the Safe Blood Transfusion Programme. The key feature of WBDD celebrations has been the organization of various competitions to mark the Day, including speech, essay and poster competitions. These competitions are participated by a very large number of spirited youth who get an opportunity to express their talent and gain recognition and at the same time creates awareness about the noble cause. The media coverage of the WBDD celebrations is increasing every year and the Programme issues a special edition of its E-newsletter and also a full pictorial Report to cover the WBDD activities. Many of these activities are graced by important policy makers and social personalities.

National Ambassador

In February 2016, Ms. Sharmeen Obaid-Chinoy was appointed as the 'Honorary Ambassador for Blood Safety' by the Government of Pakistan. Sharmeen Obaid-Chinoy is a double Oscar Award winning film maker from Pakistan. She is an internationally acclaimed filmmaker known for highlighting women right issues and has also produced documentaries on various health issues including blood transfusion and blood safety. As 'Honorary Ambassador,' Ms. Chinoy promotes the culture of voluntary blood donation especially among the youth besides advocating safe blood transfusions in Pakistan.

International Ambassador

In August 2017, the Programme signed an agreement, through ABBOTT Diagnostics, with the renowned international football star, Cristiano Ronaldo, to promote the culture of voluntary blood donations in Pakistan. The Ronaldo national campaign is planned to be launched in early 2019.

Donor Haemovigilance Guidelines

Through the technical assistance of International Hemovigilance Network and WHO, the SBTP revised the national guidelines on quality control in transfusion medicine. The revised document 'National Guidelines for Quality Control in Transfusion Medicine 2017' includes a special chapter on donor haemovigilance, e.g. definitions of the adverse events, data collection forms, etc. Through the Islamabad Blood Transfusion Authority, the donor haemovigilance has been made a pre-requisite for licensing of blood banks. The same strategy has now been adopted by the other provincial and regional Blood Transfusion Authorities.

USAID Funded Jphiego Project

USAID funded Jphiego project, an affiliate of the Johns Hopkins University, is implementing a Mother and Child Health project in Pakistan with a particular focus in the interior of Sindh. The SBTP experts in collaboration with Jphiego organized VNRBD and blood safety seminars in 15 districts of interior Sindh through three visits. Extensive interaction with the local political and society leadership as well as the general public was done during these activities for the promotion of VNRBD in the region.

National Blood Donor Management Workshop

The World Health Organization in collaboration with the Safe Blood Transfusion Programme convened a national consultative workshop on Blood Donor Management in 2017. The workshop was organized to strengthen blood donor management which is identified as a critical need in the country. The training was facilitated by internationally renowned experts in the field of blood donor management; Prof. Wim de Kort, Professor of Donor Healthcare, University of Groningen, Netherlands, Dr. Eberhart Lars, Head of Donor Department, Austria, Dr. Yetmgeta E. Abdella, Head of Blood Safety Unit, WHO-EMRO, Cairo, Egypt and national experts, Prof. Hasan Abbas Zaheer and Dr. Noaman Siddiqui. The meeting participants included stakeholders working as blood donor managers, programme managers, senior haematologists and transfusion specialists. The training provided current information on the essential components of blood donor management including infrastructure requirement for blood donor management, establishing and maintaining blood donor base, donor recruitment and retention strategies, safe blood collection techniques, blood donor counseling, referral and care, human resources management, information technology, and ethical considerations in blood donor management. The Donor Management training has special relevance at this stage as the RBCs

developed in the Phase I are operational and providing direct benefit to the people by providing safer blood. It is thus important that improved Donor Management services are in place in the new infrastructure as well as in the existing system.

Collaboration with Facebook

The global social media giant “Facebook” launched a blood donation Feature for Pakistan in early 2018 in collaboration with the SBTP. The Feature makes it possible for people to easily sign up to be blood donors and to help connect donors with people in need and blood centers. This is the first time that Facebook has launched any Feature specifically for Pakistan, a country with 35 million Facebook users. The Pakistan specific blood donation feature on the Facebook allows potential donors and the blood centers to become connected in a coordinated manner. Success of this FB Feature will redefine the voluntary blood donation scenario in Pakistan in a most cost-effective manner. It will also compliment the national efforts to promote blood safety being implemented through the German government funded Safe Blood Transfusion Project which is developing a nationwide network of modern RBCs. Joint workshops have also been organized with the representatives of the blood banks and BDOs to familiarize them with the Feature to help promote its use.

Media Coverage

The SBTP team regularly interacts with the print and electronic media for awareness and sensitization of the general public on blood safety, VNRBD and rational use of blood. In addition, media personnel are invited to cover the SBTP seminars/workshop coverage. Supportive coverage of the blood safety campaign and its messages in the press, on radio and TV, and by web-based news providers is enhancing SBTP visibility, broadening its audience and lending added credibility to the message.

SBTP Publications

The Programme has been promoting the culture of research and development in the transfusion sector in Pakistan. Following is a list of published research articles in international journals and conferences with reference to VNRBD;

1. Ahmad M, Saeed M, Waheed U, Khalid A, Rasheed N, Ghaznavi S, Arif M. Blood donation: General perception of University students in Lahore, Pakistan. *Vox Sanguinis* 2017; 112 (Suppl. 1): p 111.
2. Noor ul Amin M, Ramzan M, Waheed U, Arshad M. A nexus between volunteerism and blood donation: A case study of PMAS-Arid Agriculture University Rawalpindi and Quaid-i-Azam University Islamabad, Pakistan. *Vox Sanguinis* 2018; 113 (Suppl. 1): p 123
3. Ansari A, Waheed U, Zaheer HA. Establishment of Donor Haemovigilance System in Blood Banks of Islamabad, Pakistan. *Vox Sanguinis* 2015; 109 (Suppl. 1): p 148-9.
4. Inventory of Blood Donor Organizations, SBTP 2011 (available at www.sbtp.gov.pk)
5. Kayani IS, Ishtiaq M, Waheed U, Zaheer HA. Adverse Reactions in Blood Donors in a Tertiary Care Teaching Hospital Blood Bank of Islamabad. *JIMDC*. 2016; 5(2):81-83.
6. Kayani IS, Waheed U, Hafeez R, Maqbool A, Zaheer HA. Implementation of Donor Haemovigilance System in Islamabad, Pakistan. *Vox Sanguinis* 2016; 111 (Suppl. 1): p 142.
7. Los APM, Waheed U, Kohorst P, Smid WM. Creation of an enabling environment for Voluntary Blood Donation in Pakistan. *Vox Sanguinis* 2012; 103 (Suppl. 1): p 100.
8. National Blood Donor Policy, SBTP 2011 (available at www.sbtp.gov.pk)
9. Mumtaz Z, Bowen S, Mumtaz R. Meanings of blood, bleeding and blood donations in Pakistan: implications for national vs global safe blood supply policies, *Health Policy and Planning*, 2012; 27: (2) 1, 147–155.
10. National Blood Policy and Strategic Framework 2014-20, SBTP 2014 (available at www.sbtp.gov.pk)
11. Ullah I, Shahzad A, Waheed U, Zaheer HA. Knowledge, Attitude and Practices regarding Blood Donation in Islamabad Capital Territory: A Sociological Study in Public and Private Hospitals. XI Annual Conference of Asian Association of Transfusion Medicine, Oct 9-11, 2015, p128.
12. Waheed U, Arshad M, Sultan S, Saeed M, Arshad A, Irfan SM, Zaheer HA. Iron deficiency and iron deficiency anemia in blood donors at a tertiary care hospital in Islamabad, Pakistan. *Glob J Transfus Med* 2018;3(1):17-20

13. Waheed U, Azmat M, Zaheer HA. Knowledge, Attitude and Practices towards Blood Donation: A Nationwide Survey. *Hematol Transfus Int J.* 2015; 1(4):00018
14. Waheed U, Azmat M, Zaheer HA. Knowledge, Attitude and Practices towards Blood Donation: A Nationwide Survey. *Hematol Transfus Int J.* 2015; 1(4):00018. DOI: 10.15406/htij.2015.01.00018.
15. Waheed U, Zaheer HA. Donor Vigilance in Blood Transfusion Services, Pakistan Institute of Medical Sciences, Islamabad, Pakistan. *Blood Transfus* 2014; 12(Suppl. 2): s457.
16. Waheed U, Zaheer HA. Evaluation of Deferral Pattern among the Blood Donors in Islamabad, Pakistan. *Glob J Transfus Med* 2016;1(2):81-84
17. Workshop Report: The Role of BDOs in Promoting VNRBD, SBTP 2015 (available at www.sbtp.gov.pk)
18. Workshops Report: National Consultation of PakBDO Association, SBTP 2016 (available at www.sbtp.gov.pk)
19. Zaheer HA, Waheed U. Blood Safety System Reforms in Pakistan. *Blood Transfus* 2014; 12(4): 452-457.
20. Zaheer HA, Waheed U. Blood Safety System Reforms in Pakistan. *Blood Transfus* 2014; 12(4): 452-457.
21. Zaheer HA, Waheed U. Blood Transfusion Service in Disasters. *Transfus Apher Sci.* 2016; 55(2). <http://dx.doi.org/10.1016/j.transci.2016.09.007>
22. Zaheer HA, Waheed U. World Blood Donor Day Report, SBTP 2010 (available at www.sbtp.gov.pk)
23. Zaheer HA, Waheed U. World Blood Donor Day Report, SBTP 2011 (available at www.sbtp.gov.pk)
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29. Zaheer HA, Waheed U, Wazeer A. World Blood Donor Day Report, SBTP 2017 (available at www.sbtp.gov.pk)
30. Zaheer HA, Waheed U, Kaenat N, Tahir S. World Blood Donor Day Report, SBTP 2018 (available at www.sbtp.gov.pk)