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TRANSFUSION TODAY

ISBT

The ISBT Developing Country Award

World Blood
Donor Day 2012

32nd International
Congress of the ISBT



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Global launch celebrations in Korea 2012 World Blood Donor Day

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Judith Chapman

Editorial

Three years ago Erhard Seifried then President of ISBT proposed the 'ISBT Developing Country Award'. A small group led by Ravi Reddy was asked to work on the structure of the award and in September 2011 ISBT announced its establishment. 28 applications were received, of these 19 contained the complete information required. A small group appointed by the ISBT Board reviewed the applications and the winners and runners up were announced in April 2012.

This issue of Transfusion Today contains articles by the first winner of the award the Sri Lankan national blood service and the 5 runners up. They were asked to write about the work they have carried out to pursue the goal of transfusion safety in their country.

World Blood donor day (WBDD) was celebrated on June 14. ISBT is proud that it was one of the four organisations who established WBDD. This issue includes photos of World Blood Donor day from around the world and a report from South Korea where the global launch took place.

A new President and Board was installed at the ISBT General Assembly in Cancún and we in the Central Office are looking forward to working with the new Board on the development of the strategic plan 2012 - 2015 over the next two years. You can find more details in the members only section of the website. Don't forget that you can access the webcasts of the excellent Cancún congress plenary sessions online and there are plenty of photos of the congress on the website and on the ISBT Facebook page.

Challenges of Blood Transfusion in Low or Medium Human Development Index Countries

The ISBT Developing Country Award

Helping to ensure a safe and secure blood supply all over the world has been a major effort of the transfusion medicine community during the last decades.

The spread of blood transmitted diseases, especially in low and medium human development index countries has brought the safety issues of blood products into the spotlight and unfortunately has affected thousands of patient lives. Addressing the problems with a lack of infrastructure and insufficient or no virus testing systems available often seemed an impossible task for blood transfusion professionals in these countries.

The most important achievement therefore has been to create conscience, to win political support, and consequently, to secure necessary means to improve blood supply and transfusion practice.

The main challenges in transfusion medicine are reaching a consensus among health care professionals from different countries and regions in terms of what needs to be

addressed. Availability of donor screening for blood transmitted diseases, quality assurance procedures, health care professional education, donor selection and availability with promotion of voluntary non-remunerated donors worldwide, and the establishment of a functioning blood transfusion management with an adequate infrastructure are the basic elements of a safe and secure blood transfusion system.

Sri Lanka managed to establish a safe and secure blood supply system in an excellent and exemplary way. Therefore, Sri Lanka received the ISBT Award for Developing Countries. Among the 19 complete applications received, five additional countries or individuals achieved a similar success, so they have been invited to present their data as well. The six articles in this special focus issue, presented by Sri Lanka, Bhutan, Ghana, Egypt, India and Pakistan, demonstrate excellent examples



Erhard Seifried

“The most important achievement therefore has been to create conscience, to win political support, and consequently, to secure necessary means to improve blood supply and transfusion practice”.

of these advances linked to development programs of the different national or local blood transfusion services. The positive examples include data about blood donation, infrastructure, laboratory donor screening technology and health care professional education. The examples clearly document and underline the importance of such development programs in countries with low or medium human development index. Goals for the future therefore must be, to further rally for improving transfusion medicine practice especially in those countries with the biggest need, and help transfusion professionals in these countries to obtain the political, financial, and technical support necessary.

The presented examples clearly demonstrate the great impact of politically supported development programs in the area of transfusion medicine. The extension of existing programs and the creation of new programs where necessary should therefore be a top priority.

The winner of the ISBT Developing Country Award is: **Sri Lanka National Blood Transfusion Service**

The five runners up who the committee felt deserved special mention.

The runners up for the Blood Service/Centre are:

- Aga Khan University Hospital, Pakistan
- Rotary Blood Bank, Tughlakabad, India

The individual runners up are:

- Heidi Goubran, Egypt
- Mahrukh Getshen, Bhutan
- Shirley Owusu-Ofuri, Ghana

Erhard Seifried and Jörg Schüttertrumpf

German Red Cross Blood Service Baden-Württemberg-Hesse and Institute for Transfusion Medicine and Immunohematology of the Goethe University, Frankfurt, Germany



Senarath Jayasekara,
Senior Consultant Transfusion
Physician, National Blood
Transfusion Service, Sri Lanka

Development of Blood Transfusion in Sri Lanka

Blood Transfusion in Sri Lanka started in the early 1950's as a single roomed unit at the biggest hospital in Sri Lanka, the Blood Transfusion Service gradually evolved to a centrally coordinated national service which, by 2012, comprises of over ninety hospital-based blood banks controlled by the National Centre in Colombo.

Although the National Blood Transfusion Service (NBTS) kept pace with many of the major developments in the field, there was a dramatic improvement within the last one and a half decades. What triggered this was the setting-up of the postgraduate training programme in transfusion medicine for medical officers by the Postgraduate Institute of Medicine, Sri Lanka in 1998. This resulted in many educational materials being made available to the staff and many attended international conferences.

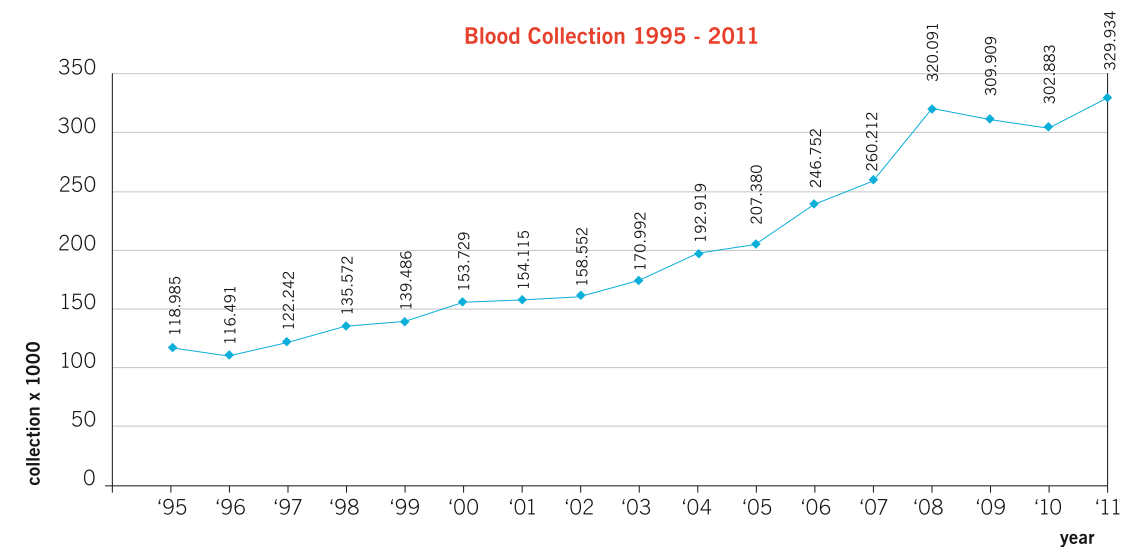
Blood Bank Development Project, funded by the Japanese Bank for International Cooperation and started in 2001, provided the next stimulus for improvement. World Health Organization was entrusted with the training and education component of the project and the WHO Consultant stationed in Sri Lanka, in addition to project related work; conducted training programmes for staff as well as clinicians all over the country.

With improvement in knowledge and exposure to the recent developments in the field, the need for improvement was evident both to the staff and the blood bank administration. Targets were set to increase the blood collection, which was less than 1% of the population at the time, by at least 10% annually to reach an estimated requirement of app. 300,000 units. This target was achieved in 2008 despite the civil unrest prevailing in the country during that period.

The next challenge was to minimize the replacement donations (which contributed to almost two thirds of the total blood collection in 2002) without a major impact on the total blood collection. This was achieved with a combination of strategies including public awareness programmes and increasing mobile blood collections. As a result, replacements have come down to a mere 4% by 2011.



National Blood Centre Colombo



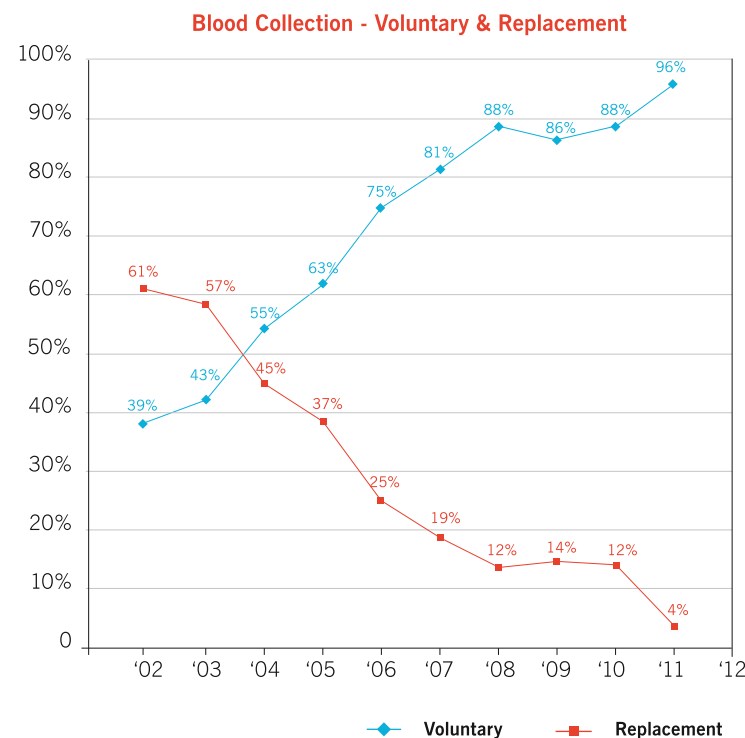
Donation testing for transfusion transmissible infections, which was being done in all the blood banks up to late 1990's; was partially centralized with WHO guidance to a limited number of centres and these were strengthened with state of the art equipment.

Under the existing set-up, blood banks in Sri Lanka are divided into sixteen "clusters". The "Cluster Centre" (usually the biggest blood bank in the cluster) has been strengthened and is responsible for coordinating some of the activities within the cluster such as blood stock redistribution, organizing and conducting mobile blood collection programmes, donation testing etc. This has played a major role in minimizing wastage due to outdated.

Hospital Transfusion Committees; initially set-up in hospitals closer to Colombo; are now spread throughout almost the entire country and play an invaluable role in bridging the gap between the blood bank and the clinicians, mainly as a result of the active involvement of the top officials of the NBTS and hospital administration.

Training & education in transfusion medicine too has evolved to a great extent while providing the stimulus for improvement. Medical, nursing as well as laboratory technology students get an early exposure to the fundamentals of transfusion medicine and workshops have been conducted throughout the country for clinicians on rational use of blood. College of Transfusion Physicians was formed in 2011 and is actively engaged in advancing knowledge as well as improving the services provided. As of now, there are twelve Consultant Transfusion Physicians stationed throughout the country. Most of them are attached to hospitals and play a key role in the transfusion management of patients.

All these developments culminated in the National Blood Transfusion Service of Sri Lanka winning the first ever ISBT Award for Developing Countries in 2012. While NBTS has come a long way from small beginnings, we know that there is still a long way to go in our pursuit of excellence.



Egyptian National Blood Transfusion Service



Heidi Goubran
Head of Serology Department,
National Blood Transfusion
Center Egypt

Blood Transfusion Services in Egypt

It is very important for any health care system to have competent blood transfusion services in order to provide a permanent supply of safe and effective blood and blood products.

The need for safe blood and blood products are crucial as the need for blood and blood products are rising remarkably due to continuous increase of population, the high prevalence of blood transfusion dependent medical conditions, physical injuries mainly due to motor car accidents and deficiency of knowledge about Appropriate Clinical Use of Blood (ACUB). In addition Egypt's health care system is struggling to improve the basic health indicators.

The blood system in Egypt lacked concrete blood regulations/ blood policy that endorse the organisational structure and defines different roles and responsibilities. This resulted in a system with multiple independent service providers that is neither regulated nor coordinated nationally which had a negative impact on the quality of the blood products and the services rendered.

In 1997 the Egyptian National Blood Transfusion Services (NBTS) was established as a joint Egyptian/Swiss project under the umbrella of the Ministry of Health. Over the years, great efforts were made to establish the NBTS network which currently consists of a National Blood Transfusion Centre (NBTC) located in Cairo and 23 regional blood centres distributed all over the country. These 24 blood centres possess the proper infrastructure and technical resources required to support all modern blood banking activities.

A highly qualified and motivated multidisciplinary team worked over the past 15 years under the inspiration and leadership of the Egyptian icon of blood transfusion Dr. Faten Mofteh, to turn the dream of establishing a modern structure for the NBTS into reality. The modern structure includes the development and implementation of the first national blood policy, national standards, testing strategy and a lot of guidelines and programmes that cover all aspects of blood transfusion.

The NBTS managed to break the reliance on family replacement as a source of donations and shift to Voluntary Non Remunerated Blood Donation (VNRBD) through a unique programme for blood donors' recruitment, retention and counselling. Also the NBTS played a leading role in the

" All these achievements have made the Egyptian NBTS a model of modern successful blood service, not only in Egypt but in the whole Eastern Mediterranean region".

introduction of state of the art technologies and applying programmes of Microbiology Quality Control for the very first time in Egypt's blood transfusion sector. One remarkable achievement of NBTS was introduction of NAT testing, which was an example of research supported political decision. NBTS conducted the first scientific research for NAT in blood donor screening and the results proved the impact of improving blood safety in such high prevalence and incidence country. As this raised the awareness of health policy makers in Egypt, shortly afterwards several other blood services providers have introduced NAT based on NBTS' recommendations. Another area in which NBTS excelled was preparation and dissemination of ACUB concepts and guidelines among clinicians resulting in better use of scarce blood resources.

All these achievements have made the Egyptian NBTS a model of modern successful blood service, not only in Egypt but in the whole Eastern Mediterranean region. However, with the current changes and instability in Egypt, two important questions comes to mind: "Will the government remain committed and able to sustain the required support to the national blood policy and help NBTS to achieve its ultimate goal of being the sole provider in the country?". And "Would the NBTS be able to sustain and build upon what has been already achieved?".



Pungtang Dechen Photrang Dzong home of Bhutan's Central Monastic Body led by HH the Je Khenpo

National Blood Transfusion Service, Bhutan

Making a steady progress

The Kingdom of Bhutan is a landlocked country between India and China in the eastern Himalayas. Bhutan has cultivated its unique approach to development with its national philosophy on the principle of Gross National Happiness (GNH).

Modern day health care was introduced in 1961 and the nearly 1 million Bhutanese people benefit from free health services from primary to tertiary health care levels provided by the Ministry of Health (MoH), Royal Government of Bhutan. National Blood Transfusion Service (NBTS) is delivered through a hospital-based blood bank model under the Department of Medical Services, MoH. With twenty seven blood banks in the country, each functions as a blood centre collecting, testing, storing and issuing blood units thus catering to the respective hospital transfusion needs. The overall planning of the service is carried out by the national blood programme. The revamping of the NBTS began in 2004 and is currently on-going. In the past eight years, NBTS has made steady progress with funding from national and international partners. Some of the achievements are summarized below.

1. Bhutan National Blood Policy:

Endorsed in 2007, the policy comprises of following key elements and is the guiding document for entire NBTS in context of demography and terrain of Bhutan:

- Ensure adequate, timely and easily accessible supply of safe and quality blood and blood products through the establishment of a National Blood Transfusion Service (NBTS).
- Ensure adequate resources for the operation of a sustainable National Blood Programme.
- Develop effective legislation and a national regulatory body to oversee the operation of the blood service in the country.
- Blood transfusions shall be advised and carried out under the supervision of a registered medical practitioner or other suitably qualified and authorized health care professional



Mahrukh Getshen,
Transfusion specialist,
National Blood Bank,
JDW, NR Hospital,
Thimphu, Bhutan

2. Improvement in voluntary, non-remunerated blood donation rate:

From 30% in 2004 to 80% in 2011 at national blood bank, Thimphu and from 32% in 2006 to 55% in 2011 at country level. This has been possible through intensification of activities like national advocacy, donor education, donor information campaigns, social networking, and holding regular blood donation camps.

3. Improvements in screening of infectious markers:

Table 1. Comparative national data of 4 transfusion transmitted infections

Infections screened	2006	2011
HIV	0.02%	0.02%
Hepatitis B	1.12%	0.89%
Hepatitis C	0.35%	0.08%
Syphilis	0.84%	0.74%

4. Infrastructure strengthening:

Blood component preparation facilities opened at two blood centres; district blood banks equipped with basic requirements and provision of a mobile blood van for each of three regional blood banks.

5. Quality systems introduced through:

5.1 Capacity building:

Pre-service training of general medical laboratory technicians in blood banking and clinical transfusion, ex-country trainings, imparting regular in-country CME programmes, trainings and workshops for the blood bank personnel.

5.2 Documentation:

Key policy guidelines, national standards, SOPs, manuals and work instructions for doctors and nurses on rational clinical use of blood.

5.3 Assessments:

International Quality Assessment Schemes (IEQAS) and National External Quality Assessment Schemes (NEQAS) in blood group serology and transfusion transmitted infections, and periodic, supportive supervisory visits of blood banks.

5.4 Good laboratory and manufacturing practices:

Current challenges and constraints

Though many targets have been achieved, NBTS is faced with many challenges that have been hampering its service delivery and quality.

- Fragmentation of services due to difficult terrain and geography and widespread health care facilities resulting in duplication of activities, low cost efficiency, difficult monitoring and compromised quality.
- Financial and administrative challenges
- Lack of strategic planning
- Lack of adequate infrastructure
- Constraints in technical capacity building
- Inadequate regulatory mechanisms

Way Forward

The blood safety programme has proposed consolidation through regionalisation of transfusion service in the next Five Year Plan of the Royal Government beginning from 2013. Once approved a national strategic plan with defined outcome and outputs for subsequent five years shall be developed and activities framed and implemented accordingly. In the meanwhile, with co-operation from government, international partners, local community and general public, NBTS has been striving hard to achieve its goal of 100% voluntary blood donation, and quality assured testing for important infectious markers through good laboratory practice and continuous quality improvement.



Entrance National Blood Bank



Shirley Owusu-Ofori
Komfo Anokye Teaching
Hospital, Ghana

Goals and achievements of the Kumasi Blood Centre, Ghana

Organisation

The Transfusion Medicine Unit (TMU) provides blood transfusion services to Komfo Anokye Teaching hospital (KATH) and other health facilities in the Ashanti Region of Ghana. TMU consists of Blood collection, Donor Care, Laboratory and Donor Organisation. The overall objective of the TMU is to maintain a sufficient (10units/1000) and continuous supply of safe blood at affordable cost. The TMU is supervised by the hospital Transfusion Committee which aims to promote the highest standard of transfusion practice in KATH. Our highlighted goals come from a gradual step-wise plan which has been accomplished with support of the Transfusion Committee and administration with no external funding.

Blood Collection

TMU blood collections have evolved over the last 10 years; from recruiting 5,000 to 15,000 donors a year and increasing voluntary donations from 35 to 70% and the supply per 1000 inhabitants from 5 to 10 units. Each step was systematically supported by data generated and published.

First step: The first of three steps involved the development of a pre-donation screening system using top of the line rapid tests to provide safe blood and decrease by 20% the cost of blood bags and ancillary costs. 100% testing is done pre-donation for viral markers HBsAg, anti-HIV and anti-HCV. Initial reactive tests are confirmed by ELISA for Hepatitis C and HIV. Current prevalence rates are 9.2%, 1.1% and 0.4% for HBV, HIV & HCV respectively. The efficacy of this innovative approach was assessed and confirmed by the addition of a triplex NAT in pools of 10 plasmas¹. An initial study found 1.7% of pre-screened samples contained occult HBV, which was undetected by a standard serologic assay. The NAT testing of 25,000 units for HIV did not reveal any positive but for HCV excluded infected units collected during pre-seroconversion window period. The implementation of NAT testing was initially on pilot basis and then

implemented routinely for serologically negative blood units². This has been interrupted due to current infrastructural challenges. The rapid tests allowed consistent and confidential communication with deferred donors; inviting them to return for the results of the confirmation of reactive tests. 30-60% of deferred donors for HBsAg carriage, confirmed anti-HIV positive and confirmed anti-HCV positive return are counselled and referred for appropriate management. This Donor Care programme focuses on young students who form 70% of our voluntary donors³.

Second step: we determined whether the population of family donors presented the assumed inferior safety record. To be epidemiologically correct, the comparison was made between first-time volunteer and family donors⁴. Data was stratified according to age and gender for 6640 volunteer and 4360 replacement donors, and analysis of anti-HIV and HBsAg prevalence (1.03% and 13.8% versus 1.1% and 14.9%, respectively) was not significantly different. This demonstrated viral safety of family donors being similar to first-time volunteer donors. To improve blood safety, both types of donors are encouraged to repeat their donation experience twice or three times a year. This has necessitated an ongoing survey to ascertain factors that enhance the generation of repeat family donors, thus converting them into repeat voluntary donors.

“ TMU blood collections have evolved over the last 10 years; from recruiting 5,000 to 15,000 donors a year and increasing voluntary donations from 35 to 70% and the supply per 1000 inhabitants from 5 to 10 units”.

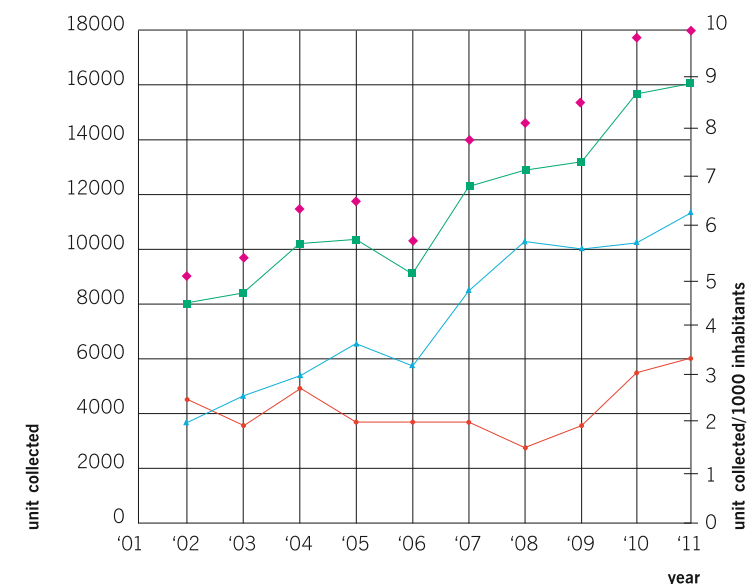
Third step: TMU developed a new source of volunteer donors by partnering with local FM radio stations. This innovation took advantage of media willingness to contribute to the community and drawing on the interest of the population for broadcasted music. Over 10 years, the blood supply generated from these ‘public drives’ exceeded 20% of total. This programme increased the supply and safety by generating a pool of 65% repeat donors⁵.

We also targeted the religious communities and examined whether or not the practice of religion in Kumasi had an impact on the low HIV-1 prevalence observed in blood donors. Results showed that active participation in community religious activities whether Christian or Muslim was significantly associated with lower HIV-1 infections⁶. Subsequent studies indicated that active support from religious leaders in the Muslim community had a major impact on the rate of blood donations in that community^{3,7}.

Conclusion

The above experience clearly indicates that high level of blood supply and the highest level of blood safety can be achieved with local resources in a resource poor sub-Saharan African regional blood centre. Transfusion committee-directed preliminary innovative and informative studies, and close adaptation to local population, culture and financial means, step by step over prolonged periods of time, has provided affordable, sufficient and safe blood for patients in the community.

Evolution of the blood supply in Kumasi, Ghana



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Sudarshan Agarwal
Chairman of the Delhi ENT
Hospital & Research Centre

Rotary Blood Bank Delhi, India

Development of Blood Transfusion in India

The availability of blood and blood products is an essential element of health care delivery system in our country. Currently, Blood Safety is one of the components of National AIDS Control Programme in India with the objective of ensuring access to safe and quality blood through a well coordinated Blood Programme.

The key strategies under this programme are;

- To increase regular voluntary non-remunerated blood donation.
- To establish Blood Storage Centres in the First Referral Units.
- To promote rational use of blood in healthcare facilities.
- To build capacity to achieve efficient and self sufficient blood transfusion services.

The current status and the development in last five years are;

- The total blood collection increased from 4.4 million units to 7.9 million units in 2011 against an estimated requirement of 10 million units per year.
- Voluntary blood donation increased from 52% to 79.5% and HIV sero-reactivity declined from 1.2% to 0.2%.
- 73 blood component separation facilities were

added to the 82 existing ones to ensure appropriate clinical use of blood.

- 18 district level blood banks and 685 blood storage centres have been established to increase accessibility of blood.
- Blood mobile and blood transport vans were provided to augment voluntary blood collection and transportation of blood from Blood Banks to Blood Storage Centres.
- Capacity building through in-service training to various categories of staff was imparted.
- However, there still remains a gap in availability and accessibility of blood at peripheral levels. The voluntary blood donation is still less than our expectation.



Rotary Blood Bank Delhi, India

With a view to making a dent on this problem of shortage of blood, Rotary Clubs in and around Delhi have set up a world class blood bank in Delhi which takes blood only from healthy voluntary donors. The 15000 sq.ft five storeyed centrally air conditioned blood bank was inaugurated by the then Home Minister on March 1, 2002. The Mission statement of Rotary Blood Bank is "No one shall suffer in and around Delhi for want of Blood ". With this mission in view, we are collecting blood from non-remunerative voluntary blood donors by organizing blood donation camps. Currently we are collecting over 42000 units of blood at over 500 blood donation camps organised by us annually. We do not accept any replacement donor. For issuing blood to persons suffering from AIDS and Thalassemia, we do not even ask for processing charges. The Rotary Blood Bank (RBB) has a total staff of over 80 people which include doctors, nurses, chief technical officer, technologists, motivational staff and the like. All the blood collected is separated into components such as red cells, plasma, platelets and issued for patients.

RBB has acquired the status of Regional Blood Transfusion Centre of Delhi on the basis of the facilities available for collection, processing, component preparation, testing and utilisation of blood/blood components.

While we are making all efforts to meet the challenge posed by the growing need for safe blood, our thrust is on enhancing quality of our products which is an ongoing process. A big endorsement of our strict adherence to quality is the fact that our products

are being used by most of the reputed hospitals in Delhi and in neighbouring areas. Blood testing and processing is done by highly sophisticated world class equipment. Infectious marker testing is carried out on a highly sensitive system that is Eci Vitros 3600. With a view to further improving the safety and quality of blood, we are also testing for Hepatitis B Core antibodies.

Our key targets are to:

- Increase the number of voluntary blood donation camps
- Maintain high standards of safety and quality
- Increase utilization of blood components

In the last 10 Years, RBB has earned a good name for itself and has collected 369603 blood Units and issued 444365 blood units and components to the needy persons. Untill July 2012, RBB has conducted 4282 Blood donation camps.

Blood collection in Delhi is approximately 400,000 units, out of which 50% is from voluntary donors. RBB's contribution towards voluntary blood donation is above 40,000 units per year.

Aga Khan University Hospital, Pakistan

Development of the Aga Khan Blood Bank



Natasha Ali
Senior Instructor Department of
Haematology
The Aga Khan University Hospital

The Aga Khan University Hospital, Karachi, Pakistan was established in 1985 and was awarded International organisations for standardisation recognition and Joint Commission for International Accreditation in 1998 and in 2006 respectively.

Founded by His Highness Aga Khan, the hospital with 721 beds provides a broad range of secondary and tertiary care. The Aga Khan University and Hospital's Blood Bank was also established in 1985. The main purpose was to cater to the transfusion requirements of admitted patients as well as work in liaison with its sister hospitals within the province to serve as a role model laboratory. From establishment till date we have practiced the guidelines of American association of blood banks (AABB) and British committee for standards in haematology (BCSH) for blood collection, processing and transfusion.

The Blood Transfusion Services in Pakistan are mostly hospital based in nearly 170 public and about 450 private blood banks. The Blood Bank works in association with Falah blood services (run by Aga Khan University medical students) and Karachi Lion's club (private organisation). Together with these two organisations, the blood bank receives approximately 30,000 donations per year through donor camps held within and outside the campus. Of which voluntary donations comprise of 12%.

All donations are processed into packed red blood cells, plasma and platelets. We also prepare cryoprecipitate – a developing country's need since factor concentrates are neither easily available nor affordable by our population. All blood donations are tested using serological methods and nucleic acid testing. In serology we test antibodies to HCV and HIV with western blot assay when a donated sample is positive for anti-HIV. We also perform Hepatitis B surface antigen, VDRL for syphilis and ICT malaria. NAT testing is done for HCV, HBV and HIV. The blood bank also has facilities for apheresis procedures which include therapeutic red cell apheresis and leucapheresis, therapeutic and donor platelet apheresis and plasma apheresis.

Each blood bank equipment and component undergoes a strict internal quality assessment according to AABB and BCSH guidelines. We participate in external proficiency testing of clinical specimens received from College of American Pathologists (CAP). The samples include blood cell antigen phenotyping, grouping, antibody screening and identification and crossmatching. All specimens are dispatched within the required time and a copy is maintained in the CAP result file. The comments and suggestions are presented in the clinical laboratories quality assurance meetings. In the last 36 months our results have been 100%.

The hospital's blood utilization committee (BUC) is represented by members of medical, surgical and nursing departments. The committee meetings are conducted once a month. A quarterly record of crossmatch to transfusion ratio and transfusion reactions is maintained. Our Haemovigilance system is based on strict coordination with the blood transfusion service, clinical staff (which includes residents and nurses) and BUC. As part of the Hospital's outreach program, three secondary hospitals have been setup in different areas of the city. Subsequently, three satellite blood banks have also been established operating under the supervision of BUC based in the main hospital. Strict guidelines and standard operating procedures are followed while dispensing blood units to these hospitals.

For continuous improvements in the quality of blood bank services on National level, we offer a structured trainee technologist programme. Trainees, who have completed their BSc or MSc qualifications, are inducted each year in this one-year programme which is unique in Pakistan and has been very successful. We induct 35 trainees in total per year and out of these 3-4, trainees rotate per month in blood bank. On completion of the programme, 80% of the trainees are then inducted as full time staff. Since its inception in 1985, so far we have trained over 900 technologists. We soon plan to introduce a fellowship programme in transfusion medicine for our medical graduates.



Peter Flanagan

Shortly before the General Assembly held during the recent Congress in Cancún, Mexico, we heard that the Dutch Superior Court had upheld the earlier decision that the elections undertaken in 2010 had been undertaken in accordance with the Society Statutes. This news was received with tremendous relief by all of the Board. It is unfortunate that the legal action had hung over the Presidency of Silvano Wendel. The fact that he, with the support of the outgoing Board, achieved so much during his term is a tribute to his tenacity and strong desire to modernise the Society and to make it truly international. In assuming the role of President I would like to take this opportunity to thank Silvano and all of the outgoing Board for their efforts in ensuring the Society remains in a strong financial position with a clear strategic direction.

The Congress in Cancún was a great success. This was the first congress where the Scientific Director, Martin Olsson, took full responsibility. Working closely with AMMTAC (the Mexican Association of Transfusion Medicine) he put together a marvellous scientific programme. Feedback has been very positive with many describing it as 'scientifically our best congress ever'. My thanks to Martin and to Julio Cesar Martinez Alvarez, the Congress President, for making it such a success.

The legal challenge to the 2010 provided a clear message that the current Statutes and By-Laws need to be updated to ensure they properly reflect the impact of electronic voting systems. Review of the documents identified a number of other areas in need of improvement. This process is now well advanced with the aim of the new versions being approved at the General Assembly in Amsterdam in June next year. The documents were discussed during a special session in Cancún and will remain on the Society website until 21st September providing an opportunity for feedback from members. This is an important process for the Society. Comment is being sought on a number of specific points and I urge you to give us feedback to help us ensure we get the best outcome.

Recent changes to Dutch tax laws provide an immediate financial challenge for the new Board. Most importantly they also mean that we need to take steps to re-view the role of the ISBT Foundation. Dutch tax authorities have now identified that the Society cannot continue to increase our financial reserves without incurring a significant tax liability. Effectively all future surplus will need to be transferred to an approved Foundation or else be subject to corporate tax. The Board is keen to ensure that the Society maintains an ability to direct the way in which the surpluses are utilised and clearly this should be consistent with the overall strategic plan. A number of options are currently being evaluated to ensure that this can be achieved.

Earlier this year the Central Office commissioned a membership survey to help us better understand what members expect of the Society and also to identify what might encourage others to join. One clear message is that we need to improve our overall offer to members and the survey identified that access to additional educational opportunities is a key priority. For the first time plenary sessions from the Cancún meeting will be made available as webcasts to members. The initial webcasts and information on how to access them are available on the members' only section of the website.

The work of the ISBT Academy continues to expand and potentially might in the future include further e-learning opportunities. Initial set-up costs will likely be significant and a thorough business case will be needed before we can move forward with this. It is an honour and a privilege to serve as the President of the Society for the next two years. There is much work to be done. I am confident that with their support and enthusiasm of the new Board, and that of the wider membership, that there is a real opportunity for the Society to grow and prosper.

Peter Flanagan
ISBT President

ISBT Board of Directors

2012 - 2014

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National Medical Director New Zealand Blood Service, Honorary Associate Professor, Department of Molecular Medicine and Pathology, University of Auckland

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Executive Vice President of America's Blood Centers (ABC).

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VICE PRESIDENT

Diana Teo, Singapore

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EASTERN EUROPE

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Assistant Professor in Haematology and Transfusion Medicine and Medical Director Of Blood Transfusion Services King Abdulaziz University.

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Neelam Marwaha, India

Professor and Head, Department of Transfusion Medicine, Postgraduate Institute of Medical Education & Research, Chandigarh

WESTERN PACIFIC

Erica Wood, Australia

Honorary Clinical Associate Professor, Department of Clinical Haematology, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Australia

Masahiro Satake, Japan

Deputy Director General of Japanese Red Cross Central Blood Institute, Tokyo



Geoff Daniels

Viva Mexico

On Thursday 12 July, Peter Flanagan, the new ISBT President, closed a very successful 32nd International Congress of the ISBT, held in Cancún, Mexico. I am sure that all delegates enjoyed the warmth of the hospitality provided by the Mexican people, the warmth of the Cancún climate. One aspect of the Congress that appeared to receive unanimous acclaim was the "Scientific" Programme. I put Scientific between quotation marks because the conference programme was not entirely scientific. The final plenary, for example, contained two very thought-provoking talks on blood philosophy. But there was plenty of exciting science. Some highlights of science for me were the duplication of a platelet in a bubble that originally contained just one cell, how to sequence the genome of a fetus from a sample of the mother's blood, and how red cells participate in circadian rhythms. I am sure that other delegates, with other primary interests, identified other high spots in the programme. One innovation at this Congress was the integration of ISBT Working Party reports and meetings into the main programme. The Working Party Chairs felt that this was a success; I hope that other delegates agree. Several people were involved in constructing the Scientific Programme, but without doubt most of the plaudits go to the ISBT Scientific Secretary, Martin Olsson.

An end to the legal affair

In 2010, Ausbio, a company based in Beijing, brought a civil action against the ISBT to the District Court of Amsterdam (because the ISBT Office is registered in The Netherlands) on the basis of alleged inconsistencies during the 2010 Board elections. The District Court found in favour of ISBT, but Ausbio then lodged an appeal with the Superior Court, which sat in March this year. The judgement was delayed three times, which meant that we had to go to Cancún not knowing the outcome. A special moment in Cancún for me occurred on the morning of the General Assembly, when I read an email from ISBT's lawyer in Amsterdam stating that, "the Superior Court of Amsterdam has rendered a judgement in which it has reaffirmed the judgement rendered by the District Court". In other words, ISBT had successfully defended its actions, a sorry saga that had dogged the Society for the last two years.

This means that the Amsterdam Courts have vindicated the 2008–2010 Board of Directors in their organisation of the 2010 elections and confirmed the legitimacy of the 2010–2012 Board. Successfully defending this case, however, did not come without financial costs to the Society. If the Society had not been financially sound, such a case could have had serious consequences. So how can we avoid any future litigation being brought against the ISBT? That is a very difficult question to answer, considering that the court affirmed that ISBT had complied with the Society rules and Dutch civil code. Clearly, organisations and charities like the ISBT must be aware of the risks of litigation and have effective mechanisms in place to minimise the risk of them occurring.

2012 elections to the Board of Directors

Since the elections for members of the Board of Directors this year were carried out under the shadow of the court case, the legal advice we received was that members should be given three ways of voting: electronically as a proxy to the Secretary General; by post; and in person at the General Assembly. This had the unfortunate effect that candidates could not be informed of the results before the General Assembly, keeping them on tenterhooks throughout the meeting. With the assistance of a US-based company, Survey and Ballot Systems, the whole election process went extremely smoothly. Celso Bianco was elected President Elect, Diana Teo Vice President, Steve Morgan Treasurer, Bridon M'baya Regional Director, Africa, Claudio Velati Regional Director Western Europe, Neelam Marwaha Regional Director South East Asia and Masahiro Satake Regional Director Western Pacific. Congratulations to the newly elected President Elect, Vice President, and Regional Directors, and I look forward to working with you over the next two years. A full list of the Board of Directors 2012 – 2014 is given in this issue of Transfusion Today.

Geoff Daniels

ISBT Secretary-General

May 2012 - July 2012

Welcome to our new members

Africa

- **MALAWI:** Lillian Mkamanga
- **UGANDA:** Isaac Kajja

Americas

- **ARGENTINA:** Beatiz Irene Livellara, Ana María Pugliese, Alejandra Vellicce
- **BOLIVIA:** Ignacio Alurralde Juarez, María del Carmen Garcia de Luna Oroasco
- **BRAZIL:** Luiz Amorim, Paulo Roberto Hatschbach, Fábio Nastari
- **CANADA:** Donald R. Branch, Augustin Kazadi-Cilumbayi, James Kerry MacDonald
- **COLOMBIA:** Ernst Adler
- **MEXICO:** Ana D'Artote, Vicencio Juárez Barreto, Norma Isabel Calvillo, Juan Carlos Garcia Rosales, Martha Hernandez Cesena, María Dolores Mejia Lopez, Elmal Vonne Sotelo Ham

- **PERU:** Willy Ceron, Belinda Rocio Cordova Cervantes, Angel Alexander Pajares Zamudio, Edvin Santiago, María Luisa De Vinatea, Roxana Zapata
- **USA:** Janet Bernard, Dale DeCan, Steven Gregurek, Colleen Holtkamp, Clay Little

Eastern Mediterranean

- **IRAN:** Maryam Akhlaghkah

Europe

- **BELGIUM:** Marcia Cardoso
- **GERMANY:** Wolfgang Mann, Eva Spindler-Raffel
- **IRELAND:** John Quigley
- **ISRAEL:** Vicky Arad, Vitali Yaresko
- **ITALY:** Francesco Equitani, Giuseppe Fiore, Marco Lorenzi, Vanda Randi, Elisabetta Raspollini, Augusto

Scaccetti

- **NETHERLANDS:** Olderik Dijkstra
- **SERBIA:** Radmila Jovanovic
- **SPAIN:** Diego Tejedor Hernández
- **UNITED KINGDOM:** Scott McGinlay, Nicole Thornton

South East Asia

- **INDIA:** Amit Agrawal, Sanjay Gupta, Yudhbir Singh Khyalia
- **SRI LANKA:** Pushpa Dissanayake

Western Pacific

- **AUSTRALIA:** Ralph Green, John-Paul Tung
- **JAPAN:** Kazuo Irita
- **LAOS:** Chanthala Souksakhone
- **SOUTH KOREA:** Jae Cheol Yun, A-Hyun Lim, Sun Mi Shin
- **TAIWAN:** Hung Ying Sheng



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2012

September 26 - 28

British Blood Transfusion Society 30th Annual Conference
Harrogate, UK
www.bbts.org.uk

October 6 - 9

AABB Annual Meeting & CTTXPO 2012
Boston, USA
www.aabb.org

October 29 - 1 November

HAA / APSTH 2012
Melbourne Convention Exhibition Centre
haa@fcconventions.com.au
www.fcconventions.com.au/HAA2012

October 6 - 9

22nd International Congress on Thrombosis
Nice, France
www.geyseco.es/mltd2012

October 25 - 26

3rd Pan-European Conference on Haemoglobinopathies and Rare Anaemias
Limassol, Cyprus
www.thalassaemia.org.cy

November 14 - 18

Course on "The Appropriate Use of Plasma Products"
Zagreb, Croatia
www.estm.info
estm.secretariat@estm.info

ISBT CANCUN 2012

32nd International Congress of the ISBT - AMMTAC

ISBT Poster Prize winners

Martin Olsson and Marion Lanteri, USA

Mexico had the opportunity to host the 32nd International Congress of the ISBT for the first time. The process started when the Mexican Society of Transfusion Medicine (AMMTAC) submitted its application during the Regional Congress of the ISBT in Egypt.

With 1906 delegates from 97 countries, 784 exhibition staff and 66 accompanying persons, the meeting was very successful and a truly international congress.

The meeting itself was an excellent mixture of science and networking. The scientific programme was outstanding and received many good reviews. Delegates also had the opportunity to network in an informal setting during the social activities. We hope that this meeting will have a positive impact on the Mexican health system with regards to the development of transfusion medicine in the future. Colleagues from Mexico and the rest of the world exchanged valuable information and experience on topics such as: voluntary donation, transfusion transmitted infections disease, clinical transfusion, quality in blood bank, immunohematology etc.

I am certain that the Mexican people that attended the Congress will remember the excellent academic programme and the many networking opportunities with other colleagues in the field for many years to come. And we hope that the international delegates of the Cancún Congress will remember “ the Mexican flavour”.

Amalia Bravo

ISBT awarded 7 poster prizes for the best posters displayed at the congress. The posters were judged according to their clarity, original scientific quality and importance in the field of transfusion medicine. Each poster prize winner receives free registration to a regional congress of their choice in 2013.

The prize winners are:

GI Simon, Australia

Development and implementation of strategies to reduce red cell wastage across public and private health sectors.

KL Bagot, Australia

Barriers to the initial conversion and continuation of plasma donation.

O Rubin, Switzerland

Microparticles from stored red blood cells induce thrombin generation.

MC Lanteri, USA

Correlation between the levels of WNV Viral load, modulation of cytokines/chemokines and clinical disease in WNV+ blood donors.

M Silvy, France

Identification of genomic breakpoint in (C) CES Type 1 variant and development of a new molecular tool for its specific detection.

X Liu, China

Determination of D1 (2 Ethylhexyl) Phtalate (DEHP) released in blood from disposable extracorporeal circulation PVC tube by HPLC.

P Ludicone, Italy

IL-15 is able to increase the ex-vivo expansion of cytokine induced killer cells.

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Cancún Quotes

“The Congress was a great opportunity to meet with people. I had been communicating and working with but never met and to renew old acquaintances. The chance to talk about my work and learn from others experience was invaluable”. **Neil Waters, International Humanitarian Blood Advisor Australian Red Cross.**

“The 32nd International Congress of ISBT was an exceptional educational experience with the invited speakers, abstracts, posters, and exhibits all contributing to learning opportunities. The members of the ISBT Working Party on Rare Donors gave exemplary presentations on their country’s Rare Donor Program activity which informed all members of the international diversity as well as the common goal of providing rare blood to the patients who need it. The presentations will be posted on the ISBT Webpage”. **Sandra Nance Sr Director, IRL Biomedical Services American Red Cross, USA.**

“The congress in Cancún was an “all inclusive experience”: The scientific program covered all aspects of transfusion safety and attracted participants from all regions of the world”. **Jose Ramiro Cruz Independent Consultant, USA.**

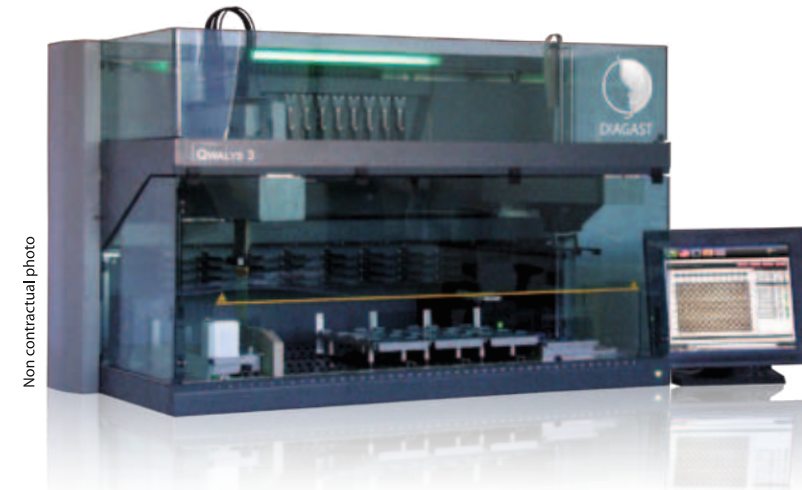
“The Congress was quite informative and I learnt quite a number of issues especially through the ISBT WP TTID sessions as I am pursuing my PhD studies in this area with University of Groningen. I am grateful that ISBT and T-REC supported me financially to attend the congress.” **Tonderai Mapako, Zimbabwe.**

“A highly informative, educative and interactive Congress against the backdrop of the pristine blue waters of the Caribbean. It was like a twin celebration; an academic feast and a tourist’s paradise”. **Neelam Marwaha, Head Department of Transfusion Medicine, India.**

The International congress of ISBT in Cancun, Mexico was an optimal combination of a top scientific event and the most enjoyable networking with colleagues from all over the world in a wonderful environment. The hosts’ kindness, creativity and hard work contributed significantly to the impeccable organization of the event which was evident at every step of the way. **Tomislav Vuk, Specialist in Transfusion Medicine Croatia.**

A well organised conference covering a broad range of topics. A nice new feature was the he Young Investigators (YI) breakfast session enabling young scientists to meet and discuss research. **Nahreen Tynngard, Chemist Department of Clinical Immunology and Transfusion Medicine, Sweden.**

“As expected, ISBT organized a remarkable Congress in Cancun. Bathed by the crystalline blue Caribbean waters and a wonderful weather, Cancun offered to all delegates an opportunity to present state of the art lectures and conferences, with more than 250 speakers from more than 50 countries, with a comprehensive scientific program covering all aspects of Transfusion and Cellular Therapy. In addition, Cancun established permanent links for many professionals from Mexico and neighbouring countries with the people from several developed countries. In summary, the ISBT International meeting in Cancun fulfilled its mission by not only having a high scientific content, but also by sharing knowledge, teaching and permanent contact between members from all over the world”. **Silvano Wendel ISBT Past President, Brazil.**



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Photo Pascal Tournaire



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Global launch celebrations in Korea

2012 World Blood Donor Day

You can be a hero by giving blood. By giving blood, you are saving millions of lives every year and help improving life expectancy and the quality of life for patients and their family.

The main objectives of the 2012 World Blood Donor Day (WBDD) in Seoul were to thank voluntary blood donors for their noble action of love and to recognize the importance of blood donation around the world. The Republic of Korea National Red Cross, was the host organization of the 2012 WBDD. The events begun with a series of celebrations including the creation of the world's largest human blood drop with 3006 students of Baekseok University on February 23. This blood drop broke all previous records of the Guinness World Records.

The 2012 WBDD "Every Blood Donor is a hero" theme was clearly stated throughout various activities, such as O.X quiz show, photo zone, message board and a mobile blood collection donation ceremony. These activities were held at the Cheong Gye Square, Seoul and with over 1,000 participants these activities were well attended. Also for the younger ones a puppet show was organized to teach them the importance of donating blood.

From April to May the Korean Red Cross held a 'Hero Photo Contest'. Blood Donor heroes were invited to take a picture at the donation centre and upload them. Around 1,000 blood donors participated in the contest.

During June various events were organized to raise awareness of the need of safe blood and to recognize the voluntary blood donors who donate

blood on a regular basis. The events included a ceremonial first pitch at the Korean Baseball game by blood donation heroes and a light show at the Seoul Tower representing the colour of blood. Also pictures of the 2012 World Blood Donor were displayed at an exhibition. Representatives of the WHO, IFRC, IFBDO, and ISBT, the minister of Health and Welfare, Republic of Korea (RoK), Rim Chemin, and President of Korean Red Cross, Yu Jungkeun paid tribute to the tireless dedication of blood donors, not just in Korea, but all across the world on June 14.

Not only individual blood donors but also representatives from the corporate, public and private sector were recognized as heroes in practicing social responsibilities at the ceremony. Blood experts and volunteers who are involved in blood service delivery from over the world, shared their experience and discussed international perspectives on self-sufficiency of blood and blood products based on voluntary non-paid blood donation at a scientific symposium. A special dinner was hosted by the Prime Minister of RoK. The Prime Minister invited all the foreign guests and awardees to express sincere gratitude to blood donors for their heroic gesture and encouraged them to donate blood on a regular basis. The 2012 WBDD celebrations ended with a concert for blood donors. Around 1,000 blood donors and their families joined the concert and celebrated the true joy of blood donation together.

"You are a true hero.
Every blood donor is a hero".



Superman, Supergirl, Batman, Batgirl, Sailormoon(Japanese cartoon hero) and other super heroes are standing with blood donors. The cards say 'Every Blood Donor is a Hero' in Korean. Cheonggye Plaza, Seoul



World's largest blood drop created by 3006 students of Baekseok University.



Ceremonial pitch Seoul



Ceremonial pitch Seoul

World Blood Donor Day Russia



1



2



3

- 1. WBDD in Krasnoyarsk
- 2. WBDD in Ivanovo
- 3. WBDD in Krasnoyarsk
- 4. WBDD in Ivanovo



4

WBDD in Mauritius and Malawi



1



2



3



4

- 1. Deputy Minister of Health of Malawi giving an award to a long time donor.
- 2. Deputy Minister of Health of Malawi, Chair and Trustees of the MBTS marching to commemoration venue.
- 3. Long time donors who received an award, Deputy Minister of Health of Malawi and Chairpersons all pose for a picture.
- 4. WBDD Mauritius where people gathered on the beach to create a blood drop.

World Blood Donor Day Argentina, Brazil, Peru, Uruguay and Venezuela



- 1. WBDD Uruguay
- 2. WBDD Venezuela
- 3. WBDD Brazil
- 4. WBDD Peru



WBDD in Mexico and the USA



- 1. WBDD Mexico
- 2. WBDD USA



World Blood Donor Day

Iran Saudi Arabia UAE

- 1. Three Iranian bicyclists took the road of Tehran to Ankara in commemoration of World Blood Donor Day
- 2. (UAE) Donor donating blood
- 3. (Saudi Arabia) Group photo with Thalassaemic patients



World Blood Donor Day

India

- 1. WBDD India
- 2. WBDD India
- 3. WBDD India





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