



Training Workshop on
Achieving 100% Voluntary
Non-Remunerated Blood Donation
for Priority Countries in Europe
and Central Asia

**Barcelona, Spain
16-18 June 2010**

ABSTRACT

The workshop, organized as a collaborative activity between WHO, the Health department of the Government of Catalonia, Spain, and the International Federation of Red Cross and Red Crescent Societies, followed the global celebration of the World Blood Donor Day event 2010. Representatives from fourteen priority countries agreed upon the barriers and challenges in achieving 100% voluntary non-remunerated donation of blood and blood components, and learnt from international dedicated work, including the South East European blood safety project. Participants revised strategies and plans for the development of relevant programmes in their own countries. A set of recommendations was developed.

Keywords

VOLUNTARY NON-REMUNERATED BLOOD DONATION
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Introduction

Availability and safety of blood and blood products remain a major concern in many countries around the world. The importance of voluntary non-remunerated donation, a cornerstone of a safe and sustainable national supply of blood and blood products, has been reaffirmed by several World Health Assembly resolutions (including WHA28.72 and WHA58.13). The WHO Global Consultation on Universal Access to Safe Blood Transfusion held in Ottawa in 2007 confirmed the difficulties faced by many countries in achieving blood supplies based on 100% voluntary non-remunerated blood donations as a major constraint to the availability of adequate transfusion therapy.

During the follow-up WHO Global Consultation on 100% Voluntary Non-remunerated Donation of Blood and Blood Components held in Melbourne in 2009, experts in blood transfusion from across the globe recommended that WHO provides technical support to Member States in the development of national voluntary non-remunerated blood donor programmes in priority countries.

There is wide variation in the rates of non-remunerated voluntary blood donation, both between and within WHO regions. Until 2007, 57 countries globally reported collecting 100% of their blood supplies from voluntary unpaid donors. Within the WHO European Region, several countries still have low rates of non-remunerated voluntary blood donation and are therefore considered priority countries for targeted capacity building in this field.

The workshop in Barcelona followed the global celebration of World Blood Donor Day (WBDD) 2010, and was jointly organized as a collaborative activity between WHO Headquarters Blood Transfusion Safety team, WHO Regional Office for Europe, the Health Department of the Government of Catalonia and the International Federation of Red Cross and Red Crescent Societies (IFRCRCS).

A total of 46 people participated in the workshop: 38 representatives of the 14 out of 15 invited priority countries (there was no representation from Turkmenistan), representatives from the Council of Europe (CoE), the International Federation of Red Cross and Red Crescent Societies (IFRCRCS) and Global Aids Programme, as well as staff from WHO Headquarters and the WHO Regional Office for Europe and a WHO temporary adviser.

Opening address

In his opening address, David Elvira, General Director of Health Resources, Health Department, Government of Catalonia welcomed meeting participants. It was considered an honour to host this important and necessary event, which worked as a satellite to the WBDD 2010 celebrations held in Barcelona on June 14. The WBDD 2010 motto “New Blood for the World” underlined the need for concerted actions targeting youth, to ensure long-term continuity of safe blood supplies for patients in need. The blood donor achievements in Catalonia are the result of coordinated work, in which the Catalonia Blood Transfusion service, the Tissue Bank and the Catalonian blood donor association played key roles. Such actions require committed support from multiple stakeholders, which include the government, health-care institutions, professional and patient organizations, non-governmental sector and the community at large.

Voluntary blood donation as the key for safe and sustainable blood supply constituted the background of the meeting, presented by WHO and IFRCRCS representatives. Milestone events, such as the 2007 Ottawa WHO Global Consultation on Universal Access to Safe Blood Transfusion, and the 2009 Melbourne Global Consultation, led to defined recommendations to WHO to provide guidance and support in the development and implementation of national blood programmes, in particular for priority countries. The criteria to define a priority country were:

- low donation rate (below 10/1000)
- less than 50% voluntary non-remunerated blood donors
- high prevalence for viral markers and other blood-borne pathogens, and
- high maternal mortality, above 500 per 100 000 live births.

The workshop was organized for the priority countries in the WHO European Region to share experiences, to identify needs and priority activities and to draw appropriate country strategies and plans for safe blood donation.

While it was recognized that the full achievement of an all-voluntary blood donor base is a challenging endeavour in certain circumstances, it should be considered feasible and the successful Catalan experience in this field should be seen as an inspiring example.

The workshop was officially opened.

Objective of the meeting

The event was expected:

- to provide an opportunity for information exchange and shared experience related to voluntary non-remunerated donation of blood and blood components in participating countries;
- to facilitate the identification of needs, challenges and priority activities in the development of national programmes for 100% voluntary non-remunerated donation of blood and blood components; and
- to assist in the process of design/revision of country strategies and plans for the development of national programmes for 100% voluntary non-remunerated donation of blood and blood components in participating countries.

Ultimately, the training provided during the workshop was expected to strategically contribute in the long term to strengthening the safety and sustainability of supplies of blood and blood products to meet the transfusion requirements of patients in need in participating countries.

Global perspectives on voluntary non-remunerated donation of blood and blood components

The need for access to safe blood supplies depends on various factors. In the first place, it depends on the level of health-care development and morbidity patterns in the countries. According to the WHO global database of blood safety (GDDBS) 2008 reports, 93 million units of blood are collected annually worldwide (173 reporting countries) presenting a wide geographical variation in the distribution of collected blood and in the prevalence of viral carriers.

Globally, 62 countries reported collecting their blood from unpaid voluntary altruistic donors only, and a progress of more than 10% increase of the altruistic donations was observed in

another 56 countries, of which 52 are developing and transitional countries. More information can be found at www.who.int/bloodsafety and www.who.int/worldblooddonoraday.

Main challenges in addressing safety of blood and blood products supplies at global level have been identified, such as the limited government support, lack of dedicated policies and legislation including the absence of a comprehensive national blood programme; the fragmentation of services, with inadequate infrastructure leading to low quality and efficiency; the lack of dedicated budget for the blood service and of sustainable financing mechanisms. These usually occur in settings subject to high prevalence of transfusion transmissible infections in some regions and risk of transmission through unsafe blood, and where outreach community programmes lack and there is almost complete reliance on paid and replacement donations.

The vision of the WHO Blood Transfusion Safety programme is universal access to safe blood and blood products for transfusion, and its mission follows on the implementation of numerous dedicated WHA and Executive Board (EB) resolutions. The strategy for 100% voluntary non-remunerated blood donation has been jointly developed by WHO and the IFRCRCS, to provide a framework for global action around four pillars:

1. Creating an enabling environment for 100% voluntary non-remunerated blood donation;
2. Fostering a culture of voluntary blood donation;
3. Maintaining a safe voluntary blood donor base; and
4. Providing quality care for donor health and safety.

The 2009 Melbourne Declaration and numerous promotion and capacity building activities like the present workshop are supporting its implementation.

European perspectives on voluntary non-remunerated donation of blood and blood components

The WHO European Region extends beyond the border of the European continent, including central Asian republics and Caucasian republics. Blood services are subject to sub-regional variations, in terms of development, and capacity of delivery. An ageing population with a shrinking donor pool, stricter safety requirements and complex morbidities with reliance on blood transfusion therapy are leading to a mismatch between supply and demand in blood and blood products. The latest reports to the WHO global database record a slight decrease in the overall blood supply at Regional level in 2008, compared to 2007, with variations in donation levels of more than ten times across the Region. There are 27 European countries that have reached 100% voluntary non-remunerated donation, while other Member States are at different stages of progress towards this goal.

Blood safety is considered a priority on the WHO health agenda, in both a global and European context and particular attention is given to the voluntary, regular and non-remunerated donor because this is considered the cornerstone of safe and adequate blood supplies. This is supported by the European Commission directives and CoE dedicated recommendations.

The EU legal framework for blood and blood components was defined by directives: 2002/98/EC; 2004/33/EC; 2005/61/EC; 2005/62/EC; and 2009/135/EC. In particular, article 20 of the blood directive 2002/98/EC specifically encourages voluntary non-remunerated blood donations as a base for safe blood supplies. There are EU funded projects, such as DOMAINE,

dedicated to blood donor management (www.domaine-europe.eu), and EUOBUP, which promotes the optimal use of blood (www.optimalblooduse.eu).

Since its initiation, WBDD has been celebrated and supported widely in the European Region. The special issue of the *Eurobarometer* on blood donation and transfusion showed that 37% of Europeans are donating, i.e. a 6% increase compared to the 2002 earlier survey (EU15).

Efficient and cost-effective national blood programmes, with sustainable funding and well-trained professionals, are expected to meet the transfusion requirements of patient populations, in a safe and timely manner. Introducing required changes needs integrated approaches at a health systems level, supported by sustained capacity building of the health-care profession, the patient and the community. In all circumstances, the voluntary regular non-remunerated blood donor remains the cornerstone. More information can be found at <http://www.euro.who.int/en/home>

Session I. Challenges, barriers and lessons learnt in achieving 100% voluntary non-remunerated donation of blood and blood components

Country presentations

Representatives from the 14 participating European countries made short reports on the situation of their national blood transfusion services, with particular emphasis on the characteristics of the blood donor base and the improvement plans deployed and foreseen.

ALBANIA

Voluntary blood donation was stated as high priority by the Minister of Health, and significant actions had been undertaken in this respect.

Until 1990, blood was collected through paid donations, leading to a powerful paid donor association. Donating blood was not recognized as a respected public service, and several attempts to launch voluntary donation plans were unsuccessful. Starting in 1998, all patients undergoing surgery were requested to bring family donors.

In 2005, Albania started a reorganization of the blood service based on EU legislation, WHO and CoE recommendations, and following a strategic plan approved by the government. The national blood safety strategy was launched in 2006, with the national blood programme. In 2009, the national voluntary blood programme (developed as part of the South Eastern Europe blood safety project) was officially endorsed.

Latest reported data (2009) show a total blood collection of 22 724 units, collected from 59.5% family replacement donors, and 19.3 % voluntary donors (78.5% first time donors). Since 2003, total blood collection has doubled, and unpaid donation has been raised 5.7 times. National needs were calculated to be 30 000 donations, setting the target for promotion and recruitment campaigns focused on unpaid donations. Further capacity building in donor education, promotion and retention is still required.

Regional units for promotion have been organized around the country, and they are trying to switch family replacement donors to voluntary unpaid regular donors. Celebrations around and

beyond WBDD are supported by the Ministry of Health, the Albanian Red Cross, Organization of Voluntary Donors, and other stakeholders.

ARMENIA

Armenia has a population of 3 million. There has been registered growth in the amount of collected blood in the country. In 2009, 12 560 units of blood were collected, of which 54.6% from paid donors (US\$ 30 is paid per donation), 40.4% from family/ replacement donors and 5% from voluntary non-remunerated donors.

The Ministry of Health oversees the functioning of the blood service. The law proposal “On donation and transfusion of human blood and its components” is on the agenda of the National Assembly of the Republic of Armenia. Currently, blood services are financed by the national budget.

There is a national programme in place to improve the quality and safety of transfusion services. Non-remunerated donation is promoted in schools and higher-education facilities on an individual basis and through mass media. There is a gradual transition to collect blood from non-remunerated donors and a gradual transfer of the function of blood collection to non-profit organizations.

The public organization “Club 25” is the most active in promoting voluntary non-remunerated blood donation, particularly towards young people. Students, the Union of Women in Armenia and members of political and non-governmental organizations have all taken part in blood donation events.

Blood Services of Armenia have received funding from the Global Fund on strengthening health systems to develop the national programme of blood safety. In accordance with this programme, the technological base of the blood services will be upgraded and a register of blood donors will be created.

AZERBAIJAN

The development of blood donation in Azerbaijan (population 9 million) followed five main stages:

1. 1927–1940: the first blood transfusions and establishment of blood donation in the country,
2. 1941–1956: establishment of the Research Institute of Blood Transfusion in 1943 through Resolution of Ministers’ Council,
3. 1957–1990: development of voluntary blood donation,
4. 1991–2003: transition period, and
5. 2003–present: the reorganization of the blood service and the implementation of the project *Rehabilitation of the Blood Services of Azerbaijan*.

Currently, the blood collection figures increased from 17 142 in 2003 to 45 149 in 2009.

The system was regulated by law in 2005 and it is fully funded by the government. Blood services in Azerbaijan are overseen by the Research Institute on Haematology and transfusiology, which includes the central blood bank. There are interregional blood banks in the cities of Gyandzhe, Sheki and Gube, and in the autonomous republic of Nakhchivan.

There are 70 blood service establishments, 4 blood banks and 86 blood banks for treatment and prophylactic establishments, 18 located in Baku. In the population, there is a sizeable prevalence of haemophilia, sickle cell anaemia and thalassaemia.

The country benefited from Norwegian cooperation support projects, both in equipment and training (in situ and in Oslo). In 2008, a law was passed by which only non-paid donors are admitted. There is no remuneration for donors other than in some cases travel expenses.

BOSNIA AND HERZEGOVINA

Bosnia Herzegovina Federation

The Federal Ministry of Health in Bosnia and Herzegovina oversees The Federal Institute of Blood, which distributes blood to the Sarajevo General Hospital, the Sarajevo Clinical University Centre, and other transfusion centres.

Blood donation campaigns are organised via the government, NGOs, the Association of Voluntary Blood Donors of Sarajevo canton, the Federal Red Cross, the private sector and media support. The Federal Red Cross organizes 10–12 blood donation campaigns per year in association with the Federal Institute.

In the last three years, the number of voluntary blood donations has increased to 12 650 blood donations, from 100% voluntary donors. The level of donation is 10/1000.

The expectations for the future include implementing the recently adopted Law on Blood on a Federal level, regulating the relationship between transfusion centres and the Federal Blood Institute, developing a unique database of unpaid blood donors, increasing the number of voluntary blood donors, and improving cooperation between the Federal Red Cross and Federal Blood Transfusion Institute.

Republic of Srpska

The population of the Republic of Srpska is 1.5 million. The Law on Transfusion Medicine and Blood Safety Strategy in the Republic of Srpska were passed in 2008. Regulations include donor selection criteria and blood collection site conditions. There is a rulebook on the rights and benefits of voluntary blood donors.

The Institute for Transfusion Medicine of the Republic of Srpska in Banja Luka was founded in January 2009. It oversees four transfusion medicine centres responsible for blood collection, processing, storage and distribution, and ten hospital medicine services, responsible for all activities related to blood receivers. The Institute is funded through the Health Insurance Fund and through self-financing.

In 2009, there were 26 417 blood units collected, of which 70.9% family/replacement donations and 29.1% voluntary unpaid donations.

The Program for Voluntary Blood Donation in the Republic of Srpska (2010–2015) is a strategic plan with a vision to fully satisfy the need for blood and blood components through voluntary blood donation. The plan is funded with €783 750, and encompasses provisions for legislative measures, resources, training, partnership, education of donors, selection of donors, blood collection and monitoring and evaluation.

GEORGIA

In Georgia, there are 37 000 donations collected per year representing less than 1% of the population. 95% of blood donations come from paid donors. A minimum of 60 000 donations is considered necessary to cover Georgia's patients' needs.

A National Safe Blood programme was instituted in 1997, aiming to ensure that all donated blood is tested for infectious markers. Through a dedicated project of refurbishment, supported by the Global Fund to Fight Aids, Tuberculosis and Malaria (GFATM), all main blood centres were provided with ELISA equipment, test systems, and computers. Confirmatory tests for positive results are performed at the National Centre for HIV/AIDS and Infectious Diseases.

The transfusion system is privately managed although there is government funding for blood donation and tests. The main challenges relate to the lack of modern quality assurance systems in the blood service, frequent use of rapid tests for blood borne pathogen identification, and paid donation. In addition, there is a very high prevalence (approximately 6%) of Hepatitis C carriers.

Developing the National Safe Blood Strategy is seen as a priority and a dedicated Working Group has been established at the Ministry of Labour, Health and Social Affairs (MOLHSA). Technical Assistance to the Working Group was provided through the World Bank supported project in 2010, with the strategy to be presented for approval to the MOLHSA in autumn 2010.

There are two blood banks promoting voluntary non-remunerated blood donation in Georgia: the Jo Ann Medical Centre blood bank and the Gudushauri Hospital Blood Bank, both of which only work with volunteer donors. A national blood donor database was established in 2007.

Initiatives to promote voluntary blood donation include a national volunteer donor recruitment TV campaign developed and implemented with the GFATM support (2006–2009). Young blood donors are recruited through the youth organization “Donor Club”, which has registered branches at eight universities. The First Lady of Georgia started regular volunteer blood donation campaigns in 2009 and the World Blood Donor Day (WBDD) is being celebrated since 2005 with expanded events every year.

The main advocacy problems encountered in Georgia include the ambiguous and passive attitude of the blood transfusion personnel and the fact that paid blood donation is deeply rooted in the public perception. Volunteer blood donation gets still little support from the society.

KAZAKHSTAN

The national programme for improving the blood service in Kazakhstan during the years 2008–2010 aims to: strengthen the organizational structure; develop legal frameworks; modernize logistics; introduce updated technologies; train staff; develop unpaid blood donation; establish a quality assurance system for blood products.

The Ministry of Health oversees the Department of Strategy and Development of Health, which the Republican Blood Centre reports to. There are 14 regional blood centres and 12 urban blood centres. The funding for the blood service in Kazakhstan is shared between the Republican budget, the local budget and other sources (investors).

In 2009, the total number of blood collection was 280 861 units, of which 79% whole blood donations and 21% plasmapheresis donations. The blood donation level is 19/1000 in the general population. Several plasma products are produced including albumin and polyvalent

immunoglobulin. Part of the blood components are subject to leuco-filtration. 60% of the fresh frozen plasma intended for transfusion is quarantined for six months.

Increasing blood donation from 20/ 1000 population to 40/ 1000 population and unpaid donorship from 89% to 95% are targets set for 2014. It is also expected that by then 90% of processed blood will meet Good Manufacturing Practice (GMP) standards. Legislation to improve the development of blood services is planned, as well as to increase the number of qualified physicians. Mechanisms to implement high-tech processes at regional blood centres are being developed. The plan comprises the establishment of a national register of blood donors and to develop voluntary unpaid blood donation in Kazakhstan based on international experience.

KYRGYZSTAN

The blood services in Kyrgyzstan are under the responsibility of the Ministry of Health. There is one new large Republican Blood Centre, 5 regional blood centres, and 39 local clinical transfusion departments. There is also one bus for blood drives.

Laws regulating the blood transfusion services were approved in 2007, with additional provisions in 2009 –2010 for clinical issues including guidelines, with Russian assistance. In 2008, the Ministry of Health adopted the programme to develop the blood services in Kyrgyzstan for 2008–2010, which presupposed implementing seven strategies to improve the blood service, and ensuring the safety of donated blood.

With support from the GFATM, non-remunerated blood donation has been promoted by the top management of the Ministry of Health and other departments, city and parliamentary officials, pop stars and the mass media. In 2008, the mobile brigade of the Blood Centre made 71 visits to educational establishments, dentist clinics, police departments, centres of certification and military departments.

In 2009, 4141 litres of blood (13.79 % of the total amount of collected blood) were rejected mainly due to positive tests for hepatitis B.

The challenges that the blood services in Kyrgyzstan are facing include:

- Inadequate infrastructure: buildings that do not meet sanitary norms and out-dated equipment
- Insufficient promotion of voluntary non-remunerated blood donation and no public financing of safe donor recruitment programmes
- Insufficient knowledge and training of staff working the blood service and clinics
- The practice of retrospective donor blood testing and direct blood transfusions
- No control of transfusion therapy prescription and no system to monitor recipients
- Inconsistent cold chain during the transportation of blood and blood products
- No centralized procurement system and delays in obtaining test results for HIV and hepatitis in remote areas

The longer-term goals of the national blood programme are to create a nationally coordinated well-organized, well-equipped service that is using up-to-date technologies and has a quality-control system in all oblasts.

LITHUANIA

For a population of 3.3 million, Lithuania has two blood establishments, one private and one public, covering the needs of 97 hospitals and collecting 96.5% of total blood donations. In

addition, two hospitals collect and process blood for their own purposes, representing the remaining 3.5% of the national volume of blood transfused.

The National Blood Centre is a public institution (not for profit) and was established by the Ministry of Health of Lithuania. It is the largest blood establishment in Lithuania and covers up to 60% of blood donations. The main goal is to provide safe blood components and plasma derivatives to Lithuanian hospitals and to promote voluntary non-remunerated blood donations. The National Blood Centre covers transfusion needs in three cities: Vilnius (the largest city), Klaipėda (the third largest) and Panevėžys (the fifth largest). It is the only blood establishment in the country which is licensed (including the laboratory) and it is also licensed for manufacturing plasma derivatives. It also holds the GMP certificate. The Centre performs individual nucleic acid tests for HBV, HCV and HIV (ID-NAT), which significantly reduces the “window period”.

Payment for blood donations started in 1995 and has been reduced several times until 2004. It is currently equal to €11 and is regarded as compensation for travel and time. In 2009, approximately 60 000 units were collected from paid donors and 32 000 from unpaid voluntary donors.

There is a formal government policy in favour of voluntary non-remunerated blood donation.

MONTENEGRO

Montenegro has a population of 0.62 million and has 16 medical doctors who are specialists in blood transfusion and 32 technicians educated to work in the Transfusion Service along with 16 technicians with laboratory and general education. There are currently two people who work on promoting voluntary blood donation.

The blood transfusion service is not organised on a national level yet but functions through the work of nine independent blood establishments that are hospital based, which collect and process blood for their own use.

There is no specific fund allocated to finance the transfusion activities in Montenegro. These services are financed from resources allocated to the host hospitals by the republic Fund for Health Insurance.

In 2003, the Republic Commission for blood transfusion was established as an expert and advisory body within the Ministry of Health. In 2004, Montenegro was accepted to the Safety Blood Project for SEE countries and in 2006, the “Strategy of Safe Blood” was adopted by the government. In 2007, legislative measures regulating blood transfusion were issued, and a National Blood programme was launched in 2008.

In 2007, blood donation in Montenegro reached 2.13% in the general population, with 80% of blood donations coming from family replacement donors, and only 20% from voluntary, non-remunerated blood donors. In 2009, the percentage of voluntary non-remunerated blood donors had risen to 26.5%. Blood donations are primarily given by men (89%) in urban settings (81%).

Strategies for blood donations in Montenegro include information campaigns for the general public and specific educational campaigns for target groups (young people, women and rural areas). The plan is to have dedicated and trained staff for the purpose and to include volunteers the promotion of safe blood donation. Working with partners (i.e. the Red Cross), involves also patients, families, clinicians and professional associations.

Provision of an adequate volume of safe blood to satisfy the needs of the population is a top priority of the Health Care System of Montenegro. The vision is to achieve 100% voluntary, non-remunerated blood donations.

REPUBLIC OF MOLDOVA

The Blood Service aims to respond to patients' needs and minimize transfusion related risks through a safe and sufficient blood supply. The continuing promotion of voluntary blood donation is considered a basic condition for safe transfusion.

A national programme "Transfusion Safety and country self-sufficiency with blood products for the period 2007-2011" was approved by the government in June 2007. The programme aims to involve public authorities, non-governmental bodies and communities in promoting voluntary, non-remunerated blood donation.

The National Blood Transfusion Centre works together with the Red Cross and Global Fund of Investments in Health to distribute information and publicise unpaid blood donation. The Centre, along with the Ministry of Health and the United States Agency for International Development (USAID), carried out an evaluation survey of blood donation in the Republic of Moldova and ran a training course for staff in the blood service on promoting, recruiting and maintaining volunteer blood donors. WBDD is celebrated, along with blood donation of public VIP. A seminar was organized for all administrative territories of the Republic of Moldova to ensure efficient promotion of voluntary blood donation.

Blood collection figures increased from approximately 70 000 units (of which 17% collected from unpaid donors) in 2007 to approximately 90 000 units (of which 16.7 % collected from unpaid donors) in 2009, reaching 22 donations/ 1000 population.

There is a national plan to promote voluntary unpaid blood donation for the period 2010–2015. Its objectives include:

- Increasing the number of voluntary unpaid blood donations to 70% of the total number of registered donations;
- Increasing the number of donors who donate twice or more a year to 25% of the total number of registered donors; and
- Increasing the number of donors aged 18–25 years to 25% of the total number of registered donors.

A number of managerial actions have been planned,, including a stronger political and social commitment at all levels to support voluntary blood donation and calling for a larger number of actors including the private sector, NGOs and media involved in the promotion efforts.

SERBIA

The blood transfusion service in Serbia is decentralized and organized on three levels:

- a) Departments/laboratories for blood transfusion, that receive blood and blood products from the Centres and Institutes for blood transfusion,
- b) Centres for Blood Transfusion in general hospitals, health centres, and clinical centres, that perform core transfusion activities, and
- c) Institutes for Blood Transfusion which are independent institutions in University centres that perform highly specialized activities, such as tissue typing and quality control, as well as coordinating activities between laboratories and Centres.

There are currently 248 000 units of blood collected per year. The main challenge is generated by the fragmentation of the service (44 blood hospital based transfusion services, 3 blood transfusion institutes - Belgrade, Novi Sad, Niš; and 70 clinical transfusion departments without clearly defined responsibilities).

In 2009, a national law on blood transfusion was approved by the parliament and a national strategy for the provision of safe blood products was accepted. National standards and standard operating procedures for collection, testing, processing, storage and transportation of blood were developed and implemented. There is currently a Motivation Plan for the promotion of voluntary blood donation with the aim to achieve 4% voluntary unpaid blood donors.

TAJIKISTAN

The Blood Service of Tajikistan is composed of 1 Republican Research Blood Centre, 3 regional centres, 44 departments of blood transfusion in medical establishments and 29 cabinets of transfusion therapy.

To ensure quality and safety, the decision was made to centralize the collection of blood at two regional blood centres and to re-organize the departments of blood transfusion into departments of clinical transfusiology and transfusion therapy. The new organizational structure will be upgraded with modern technologies, to provide an increased quality output.

In 2009, the government adopted the law on donating blood and its components, and approved a programme to develop blood donation and improve the blood services for the period 2010–2014. It also adopted a programme for blood safety control and a programme for the rational use of blood.

The number of donations did undergo substantial decrease from 32/1000 population in 1991, to 5/1000 in 2009. The quality of work on recruitment, selection and retention of safe donors needs to be urgently scaled up, considering also the 5.04% discard rate of collected blood due to infectious markers.

The strategic aims for the national blood programme in the coming years are to complete the process of centralization, re-structuring and refurbishment of the service and ensure sustainable financing; to implement quality assurance mechanisms for the testing laboratories, including external quality assessment schemes, promote voluntary unpaid donation and train medical staff in the clinical use of blood.

The aim of the national programme is to increase donation rates to 10–12/1000 population by 2014 so that there are sufficient blood donations to meet the clinical request for blood and blood products.

UKRAINE

Ukraine has a population of 46 million and its blood transfusion network includes 3 institutes, 24 regional blood centres, and 493 hospital based departments of transfusiology, many of which are currently being closed.

There is a wide range of legislation covering all aspects of blood donation and transfusion. EU Directives and CoE and WHO recommendations are being used as reference documents and guidelines. The blood service is funded through the state budget (27%), regional budget and from other sources (sponsors, investments, and insurance companies etc.).

In 2009, the total number of donors was approximately 639 600, of which 9% voluntary unpaid donors. About 40% of the total numbers were first time donors. The donation rate is 16/1000 population

There are plans to restructure the blood service by centralising it at regional level and there is support for promoting 100% non-remunerated blood donation. The goals for the blood service include updating the legal framework, encouraging regular blood donation, introducing modern methods for testing and preparing donor blood and its components, training of blood service specialists.

UZBEKISTAN

There are currently 27 blood transfusion stations and 187 blood transfusion departments in Uzbekistan. The national structure includes five regional blood centres and one national blood centre reporting to the Ministry of Health. There are legal provisions for blood transfusion and a national programme on blood safety was approved. In 2006 and 2007, detailed recommendations were developed to upgrade regional blood centres according to international standards, including improving medical and laboratory equipment at an investment of US\$ 4.9 million.

Between 2005 and 2010, more than 740 specialists were trained following WHO modules on blood safety control. A training centre for upgrading the qualifications of blood service specialists is being created and equipped at the National Blood Centre and workshops on improving the quality of transfusion therapy are planned for 2010.

A programme is being developed to promote voluntary, non-remunerated blood donation including educational products about donation and involving state institutions, mass media, NGOs, and various funds.

According to the conditions of the loan agreement with the Asian Development Bank, the government has assigned six blood transfusion stations for re-equipment, and repairs and reconstruction of five blood centres was completed. It is expected that the National Programme on blood safety will be implemented fully to meet the national clinical needs in blood and blood products, and that there will be an increase in the number of voluntary, non-remunerated blood donors.

Discussions in session I

The discussions in this session focussed around two main topics.

1. Voluntary altruistic donation:

- The definition is known but a clear distinction needs to be made between altruistic blood donation and replacement donation. In the case of replacement donation, this can mean using first-time donors and it is often a form of hidden payment for donation, both of these issues raise safety concerns.
- Increased efforts are required to educate and retain replacement donors so that they become voluntary regular donors.
- Case study examples of changes in attitude and donor population (from paid to voluntary unpaid donors) could be useful.

2. Measuring and reporting national blood supplies:

- Countries in the European Region use two forms of measurement: former New Independent States (NIS) use 'litres' and others use 'units'.
- While reporting to WHO is based on 'units' these vary in size and content and it remains to be clarified what is the correct approach, considering the new collection procedures leading to direct cellular components.

Group work I: Challenges, barriers and lessons learnt in achieving 100% voluntary non-remunerated donation of blood and blood components

The audience was split into three working groups to discuss the best approaches in moving forward towards the achievement of 100% voluntary non-remunerated blood donation. Identification of common actions that could be initiated was expected to build on the national experiences of participants involved (overcoming barriers and challenges, lessons learnt, innovative approaches and solutions).

The following grouping was made:

Group 1: Albania, Bosnia and Herzegovina, Montenegro, Serbia,

Group 2: Armenia, Azerbaijan, Georgia, Lithuania, Republic of Moldova, Ukraine

Group 3: Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan

Output of the working groups

GROUP 1

Challenges and barriers:

- Switching from replacement donation to voluntary unpaid blood donation

Lessons:

- Making the population aware that blood donors are needed
- Developing marketing tools

Solutions:

- Cooperation with other interested parties
- Development of activities in the educational setting, train-the-trainers programmes
- Check opportunities for special events, meetings, etc.

GROUP 2

Challenges and barriers:

- Low funding from health budget for promotion
- Low public awareness
- Lack of coordination of recruitment activities
- No designated and trained qualified staff in the blood centre

Lessons:

- School education programmes: targeting young donors
- Concentrate on first time and replacement donors becoming regular voluntary donors
- Take care to create a pleasant environment for donation
- Connecting with the media

Solutions:

- National strategy for implementation plan
- Public financing

- National coordinator
- Conduct a Knowledge, Attitudes and Practices (KAP) survey of donors
- Train in volunteer donor recruitment (including nurses, medical doctors, and others)
- Identify stakeholders/leaders in the community to promote volunteer donations

GROUP 3

Problems:

- Growing non-governmental structures, factories do not allow time for workers to donate
- Insufficient financial support
- Low social economic conditions of the population

Lessons learnt

- There are programmes put in place but underfinanced and not successful
- Good experiences from international assistance in the programmes

Solutions

- National registry of donors
- Information system available to keep in contact with donors
- Improving cooperation with other departments

Discussions during group work I

The discussions in this session underlined the following:

- All three groups stressed the importance of national dedicated strategies, enhanced communication and links with other public health interventions (promoting public health from the blood donor setting).
- Government commitment and leadership is essential, also when the non-governmental sector is increasingly involved in blood donor promotion. Ultimately, challenges faced by developing national voluntary blood donor programmes are similar, no matter the geographical setting.
- Multi-stakeholder approaches are a key to success, and a global example is the annual WBDD event, endorsed by the WHA, and co-sponsored by WHO, the IFRCRCS, International Society for Blood Transfusion (ISBT) and International Federation of Blood Donor Organizations (IFBDO).

Session II. Foundations of a system for voluntary non-remunerated donation: Catalan experiences

The session focused on the experiences of the Catalan health-care system, and the role of blood donor associations, digital activism and social networks in enhancing voluntary blood donation.

The current vision of blood donation in Catalonia

Catalonia's population is 7.6 million and the average life expectancy is 81.4 years. There is a high concentration of people in urban areas and a large immigrant population from other countries. It is predicted that in 2050, 45% of the total population will be aged 60 or more. The health budget for 2010 represents 26% of the total government budget. The health-care system has come a long way since 1984, to health plans for periods of three years and the development of programmes such as the implementation of a quality management system. The reform process has involved changing focus from supply to demand and establishing a true

alliance among providers and health-care management. Promoting preventive care is a key objective of the system.

A 2007 survey on blood donation showed altruism as a prevailing factor for giving blood, but also that people are heavily influenced by health professionals and their own family, especially if there was someone they knew in need of blood transfusion. Blood donation is an integral part of the health-care system and a culture of voluntary donation has been fostered by the government. The personal commitment to voluntary blood donation of the Health Minister is noteworthy. Such is also the work with key partners and stakeholders in Catalonia (Catalan Red Cross and Red Crescent Society and the Federation of Blood Donors), as well as international cooperation including working together with WHO, IFRCRCS, ISBT, and IFBD.

Accessibility to donate blood is also important. In Catalonia, 98.24% of the population have the opportunity to donate blood in or near their own town or city.

The Catalonian model on blood donation

The blood donation level in Catalonia is 39/1000 population. The Catalan blood donor base is made up of 52.9% men of which 61.1% are aged between 36 and 55 years. On average, a person makes 1.4 donations per year, 65% as part of a blood drive and 35% in a hospital setting. The reasons for donating blood are being continuously studied in order to ensure sustainability and adjust planning.

Disasters are capable of increasing the motivation for blood donation. For example, the number of blood donations given on March 11, 2004 at the time of a striking terrorist attack with many casualties is significantly greater than the previous day (16 000 versus 4000 blood donations). This indicates that there is room to mobilize the population but it should be carried out in a planned manner.

The Catalonian model involved developing a communication plan capable of increasing blood donation by gaining new donors and by increasing the number of presentations for already existing donors. Several actions were set up to widen the donor base using the mass media and via direct marketing.

The target groups included children and youth, university students, hospital settings, immigrants. There is one message for all of these groups but there are different ways to approach them. The idea is also to gradually change individual values towards collective values. Effective tools for this process include: more information, being closer to the donor, increased visibility and a positive image in the society and in the media.

Role of blood donor associations:

Representatives from Regional Associations of Blood Donors can become members of the 41 Regional Health Parliaments in Catalonia, following agreement with the Health Department. This offers an important framework for planning and decision-making. There is a network of 35 locally-based blood donor associations covering the whole of Catalonia with a federal structure giving broad local autonomy to the system.

It has been proven that a good model for voluntary blood donation requires a combination of civil society and public administration functions. The blood centre guarantees the quality of processes and gives technical support to the associations. Catalonia has successfully created a group of associations responding to the hemotherapeutic needs of the country.

Strategies of blood donor associations aim to overcome identified sociological challenges and include: orienting new associations in promotion techniques; creating associations that are capable of informing society about the need for blood donation; better donor satisfaction; better information about the use of blood and about donor's rights; active volunteers; sharing experiences and success stories at national and international levels.

Marketing initiatives to increase awareness include an advertising campaign for promoting blood donation made jointly with Coca Cola. Other examples include a bus shelter poster campaign based on the idea that your next bus could be a mobile donor unit, and advertising campaigns in major newspapers, radio, via email etc. A promotional film by Pedro Almodovar shows two men in front of a poster about blood donation and talking about it. The Red Cross is also involved in the promotion of blood donation. In addition, collaboration between the Catalan Federation of Blood Donors and the Catalan Federation of Football takes advantage of the power of football to promote blood donation, reaching larger numbers of people through the media.

How to approach blood donors through digital activism and social networks

Social networking and digital activism are transforming organizations and that new ways of generating and disseminating information can change the relationship with markets and internal knowledge management. RocaSalvatella has a long-standing collaboration with Catalonian blood donation and has been involved in promotional campaigns and the use of marketing tools.

For WBDD 2010, young people were encouraged to become voluntary blood donors through social networks. The objectives included raising awareness of blood donation through the main social networking sites, making young people conscious of the need for blood donors, updating a communication channel and promoting digital activism about WBDD as well as increasing visibility and recognition via the internet.

The project proposed promoting blood donation specifically for WBDD and also for the longer term by working on a social internet presence about the importance of donating blood. The action plan involved defining a digital identity (*Jo tinc sang/I have blood*) that is personalized in all the different sites and focused on the spaces and tools where it was desirable to create a presence. Young people were reminded about blood donation, capturing new donors and promoting loyalty.

Discussions in session II

The discussions in session II underlined:

- The importance of coordinated actions:
 - To develop specific plans and protocols to ensure clear links between various public health interventions/programmes to strengthen donor promotion; and
 - To monitor the actual use of clinical transfusion guidelines where these exist, and to support the implementation of updated protocols to monitor supply through to the end user.

- The seminal role of enthusiasm that needs to be supported through adequate funding
- The partnership question - a whole workshop should be devoted to this subject.

Session III. Global, European and central Asian initiatives for 100% voluntary non-remunerated donation of blood and blood components

This session comprised brief reviews of WHO from a global and European perspective to support voluntary non-remunerated blood donation, as well as initiatives implemented by the CoE, IFRCRCS and the Centre for Disease Control and Prevention Central Asian branch.

WHO initiatives

GLOBAL LEVEL

WHO supports voluntary blood donation through global policies and advocacy, collaboration and partnerships in providing technical guidance, norms, standards and tools, capacity building and technical assistance to countries.

WHO has a strategic partnership with the IFRCRCS, working towards 100% voluntary non-remunerated blood donation and hosting WBDD, which is a high advocacy event linked to the development of national blood programmes.

The Global Framework for Action outlines broad goals to enable countries to move towards 100% voluntary non-remunerated blood donation. The goals are to:

- Create an enabling environment for 100% voluntary non-remunerated blood donation
- Foster a culture of voluntary blood donation
- Build and maintain a safe, sustainable voluntary donor base
- Provide quality donor service and care.

Joint training workshops for required capacity building have been organized, with 15 regional and national workshops in 18 countries (more than 800 participants) held to date. In addition, an interregional workshop on selecting and counselling blood donors was held for priority countries in Africa and the Eastern Mediterranean region, in collaboration with CDC and IFRCRCS.

EUROPEAN LEVEL

The WHO blood initiatives carried out in Europe support strengthening of the blood safety global agenda, through national and regional dedicated activities. The experience in South-Eastern European (SEE) Health network is presented as a successful model for subregional cooperation. The SEE Blood Safety Project started in 2001 with nine participant countries working towards increasing regional self-sufficiency in blood and blood products. Two components of the project have been developed, with the following objectives:

Component 1. Strengthening mutual trust and acceptability of blood quality in the region objectives:

- To develop blood safety national policies in accordance with EC Directives and international recommendations; and

- To increase availability of blood through sustainable promotion of voluntary unpaid blood donation.

Component 2. Increasing transnational availability of safe blood for medical emergencies and special circumstances objectives:

- To develop the regional expert network and information system;
- To implement a national quality management system;
- To increase availability of blood by promoting voluntary blood donation; and
- To initiate an information system for stock availability of blood components.

The benefits and outcomes of the programme include increased political awareness on blood safety, the identification of gaps and priorities for action, enhanced work on updated blood legislation, increased action towards a systemic quality approach, and a regional network of experts sharing knowledge and experience. To date national assessment reports of the blood service and revised national blood safety policies were developed in all participant countries. National blood donor programmes were also developed/updated as part of this project.

Central Asian republics could potentially benefit from a similar approach with the added value of this previous experience. For further information, please visit <http://www.euro.who.int/en/what-we-do/health-topics/Health-systems/blood-safety/activities>

IFRCRCS initiatives

The IFRCRCS provides support to its member National Societies (NSs), particularly those involved in education/motivation of voluntary non-remunerated blood donation, to better manage their engagement with the local blood programme. Of the 187 NSs, up to 160 are involved in blood activities. The blood service involvement of the Red Cross is not uniform, it can range from a national, centralised full spectrum of services to the Red Cross being only involved in donor recruitment or only in donor advocacy.

In central and eastern European countries under former regimes, the Red Cross usually had total responsibility for recruiting blood donors and was very much linked to government initiatives. Twenty years have elapsed since, however, it is difficult to change attitudes and behaviour. The belief is that, at least in part, solutions will only come about through a well-structured schools education programme including appropriate teaching materials.

An educational framework containing specific learning activities was developed with the goal to promote sustainable blood programmes, built on the foundation of key principles and values of voluntary non-remunerated blood donation. The focus is now on a new generation of blood donors and the advocacy is for lasting solutions to the shortages of safe blood.

The vision of the Global Advisory Panel is to promote safe capable and self-sustainable blood services based on voluntary non-remunerated blood donation. Work is developed in close collaboration with WHO.

Council of Europe

The CoE has been involved in blood donation issues since the early 1950s. Following the Oviedo Convention from 1997, the CoE prohibits blood trade and commercialisation. Several resolutions

and recommendations focused on safe blood donors and safe blood supplies were developed since, including patients' and donors' rights.

The Guide to the Preparation, Use and Quality Assurance of Blood Components is one of the most known and used CoE publications in the field, and its 15th edition was recently published. This document establishes standards for building a safe blood donor base and defines practices to promote voluntary unpaid donation supported by medical, scientific and ethical considerations. More information could be found at www.coe.int.

Centres for disease control and prevention (CDC), Central Asian initiatives

There are many challenges shared by the blood services in central Asian republics, and CDC conducted a brief situation analysis in 2 countries at the beginning of 2010. The recorded number of blood donations per 1000 population proved to be 6 to 10 times lower than the minimal level recommended by WHO. Blood donations come mainly from unsafe donors (paid and donor relatives), with family replacement donations reaching up to 73%. The lack of centralized donor registries including donor deferrals and limited information exchange are additional challenges. Mobile blood collection teams are barely active, limiting the number of potential donors.

A review of the blood processing techniques reveals several deviations that increase the infectious and immunological risks (e.g. separating container tubes without preliminary sealing, labelling of blood components not always compliant with standards), . In addition, the cold chain is often interrupted, either by using the same containers for refrigerated and frozen components, or simply giving the blood products to relatives to transport. Blood can be sold to patients, especially when there is chronic underfunding by the government. In some instances, more than 70 % of the funding of blood services can come from the direct sales of blood products, with related documentation (clinical requests for blood) missing.

A comprehensive strategy for strengthening blood services in central Asia need to comprise a reorganization on a nationally coordinated basis supported by legislative and normative documents; upgrading of the existing infrastructure including equipment and information technologies, and strengthening the scientific basis and personnel capacity. Particular attention is required by the development of voluntary unpaid blood donation, and ensuring appropriate clinical use of blood.

CDC works on blood safety in 39 countries around the world, and plans a further expansion of its activities through the President's Emergency Plan for AIDS Relief (PEPFAR), and partnering with WHO on strengthening blood safety in central Asian republics.

Discussions in session III

The discussions in this session focussed on assistance from international organizations and regional cooperation initiatives.

Assistance from international organizations is received by various countries, within the framework of different health programmes. The potential for coordination and inter-links in the area of blood safety are not always foreseen and this needs to be addressed in order to increase the field impact of interventions. The South Eastern European Health network and blood safety project, formally endorsed by the nine Ministers of Health of the participating countries, showed

that shared experiences and common approaches can lead to successful outcomes. To become viable, regional cooperation initiatives (e.g. for the Caucasian republics or CAR) need to be first officially recognized by national health authorities.

Session IV. Country strategies and plans for the development/review of national programmes for 100% voluntary non-remunerated blood donation

This session reviewed challenges involved in developing a national programme for unpaid blood donation as well as related the organizational requirements

Key elements of a national programme for 100% voluntary non-remunerated blood donation

Government commitment is a key element in developing a national programme for unpaid blood donation. Blood transfusion needs to be recognized as integral part of the health-care service and contributing to public health, to ensure the necessary human and financial resources. Subsequently, actions specifically addressed to implement political support towards achieving a 100% voluntary blood donor base can be developed.

Organizational requirements include a national plan, supported by dedicated legislative framework and coordinated through an identifiable department at the Ministry of Health. Trained personnel, updated equipment and information systems, but also a consistent communication strategy are needed to ensure operability of the national plan. Evaluating the programme through regular data measurement and indicators will use the emerging learning experiences and enable reassessment of planned interventions.

The four pillars strategy and the subsequent directions of the Global Framework for action are recommended by WHO and the IFRCRCS in the development of successful strategies for reaching blood supplies based on 100% voluntary unpaid blood donation.

The practical example of the generic structure for national blood donor programmes developed and used within the SEE blood safety project could be used as additional guidance (downloadable from:
<http://www.euro.who.int/en/what-we-do/health-topics/Health-systems/blood-safety>)

Group work II: The development of country action plans targeting voluntary unpaid donation

Participant gathered in country teams and proposed key actions to help develop national plans for voluntary non-remunerated blood donation, adapted to their own field realities.

Albania

A national blood programme and donor programme are already in place, developed in the framework of the SEE blood safety project. The target of the national donor programme is to reach 100% voluntary non-remunerated blood donation in five years. The action plan has several key components, such as supportive legislation, resources including funding for promotion of blood donation, quality systems implemented in the blood service, training of blood service staff and volunteers.

Specific actions are foreseen for donor selection and counselling, donor collection, donor care, donor retention and for converting replacement donors into regular voluntary non-remunerated blood donors.

Armenia

The 96% paid donors and the need for a modern law on blood donation are the main challenges in the country. A new law is being developed, which should also support the reorganization of the blood service. The financial incentives are strongly anchored, and the economical consequences of plasma fractionation industry have a disruptive effect on unpaid donation. Strong efforts are required in this direction, to support the required cultural change, and WHO technical assistance is required in the process of reaching this long term goal.

Azerbaijan

Functioning of the blood service is regulated by three laws and a national network of blood centres has already been developed. There are no paid donors, but blood donation propaganda is low because of low resources. The main problems relate to supplies of consumables, which are interrupted on a random basis (e.g. blood bags, tubes etc). Sustainable financing is a priority, with direct implication on the safety of blood supplies, including capacities of promotion and retention of voluntary unpaid blood donors.

Bosnia and Herzegovina

A national blood programme and donor programme are already in place, developed in the framework of the SEE blood safety project. The plan is already being implemented, with voluntary unpaid blood donations on the increase. There is no blood donor registry yet, but efforts are targeted towards the switch of replacement donations to regular unpaid donations.

Georgia

The objective of the national action plan is a sustainable basis of voluntary unpaid donors, with the following elements: a national dedicated strategy built around national standards, responding to quality requirements, and supported by an updated legal framework. Effective strategies to promote voluntary unpaid donation will need to be designed, and their effectiveness measured with a number of target indicators, such as a 5% increase in the number of voluntary unpaid donors. Trained human resources and modern equipment for mobile drives will be needed.

Kazakhstan

The national plan for safe blood donation for 2010 has already been developed. The blood supplies in the country still rely mainly on replacement and paid donation. Efforts are made to educate the population and promote safe unpaid donation, which is considered reachable, but this is a long-term objective, which requires consistent propaganda a cultural change.

Kyrgyzstan

A plan was drafted two years ago, linked to a national plan for the prevention of malaria and hepatitis (starting in the capital Bishkek and planned to include the whole country). Work was initiated within an international support project funded by Germany, with the purchase of mobile collection equipment. Funds appear to be currently insufficient to extend this programme to the whole country. All year round, promotion activities are deployed on a random basis with other partners, linked to various celebrations.

Lithuania

The blood donor programme covers the period 2005–2015, with the aim of reaching 98% voluntary unpaid blood donations. Reaching this target requires a strong partnership in place with education centres, classes for children and tours of the blood establishments.

Montenegro

A national blood programme and donor programme are already in place, developed in the framework of the SEE blood safety project. The current plan covers the period 2010–2015. The central blood establishment in Podgorica, covering the capital, is working with 100% voluntary non-remunerated blood donation but not in the remaining parts of the country

Republic of Moldova

A national blood donor programme and plan started in 2005, and there is already a computer-based donor registry in place. There is a good relationship with mass media and the mobile telephone companies are facilitating communication with blood donors. Promotion activities are targeting youth.

Serbia

A national blood programme and donor programme are already in place, developed in the framework of the SEE blood safety project. The reorganization of the blood service network, sustainable financing, quality management systems and information system for the whole country are needed for improved donor management and blood processing.

Tajikistan

The blood donor programme in the country was developed in response to the increased need to strengthen the safety of blood supplies, within the framework of a Global Fund dedicated programme. Blood-borne infections are rising in the country; and regular unpaid donors are very necessary. Training of dedicated staff was already initiated and promotion and education campaigns for safe donation are foreseen.

Ukraine

The national dedicated plan was drafted one month ago, but is subject to important financial shortages. Several priorities need to be addressed, such as eliminating payment for blood donation, organization of mobile sessions, and training of staff to ensure donor education and care. Increased coordination with blood donor associations is expected to build synergies and impact. The goal is to increase the number of blood donations from 18/1000 population to 24/1000 population, and to process (separate into components) all collected blood.

Uzbekistan

The implementation of the national programme on blood safety is a priority, and sustained work is focused on meeting the needs of the population in quality blood components. Particular attention is given to the increase in numbers of voluntary non remunerated blood donors, through promotion and education campaigns and increasing the number of mobile collection sites. Training of dedicated staff was already initiated and promotion and education campaigns for safe donation are foreseen.

Discussions in group work II

Discussions in this session focussed on the donor safety debate related to paid versus unpaid donation and also on the road ahead towards reaching 100% voluntary unpaid blood donation.

Studies using markers for blood borne pathogens in the Ukraine were discussed. These studies showed that paid donors are safer than voluntary unpaid donors. This data presents results which are biased due to several confounding factors:

- Paid donors are a pre-screened population, first tested for infectious markers before selection as a donor; once selected, testing of a donated unit is performed. In contrast, for voluntary unpaid donations, testing is performed only on the donated blood unit (one screening layer less).
- Paid donors are regular donors (regular screening), while unpaid donors in this context are mostly first time donors (1st time screening).

In terms of looking forward towards reaching 100% unpaid blood donations, countries that have no culture for safe blood donation and increased needs for transfusion therapy face particular challenges in switching the paid donation practice to an unpaid one. While replacement donation is seen in some circumstances as an intermediate stage, it is recognized that important and sustained efforts are needed to reach the long-term goal.

The change cannot take place overnight, and requires a reshape of mentality to be supported by national health authorities within dedicated national donation/promotion programmes. In addition, it is recognized that media plays a key role in this process.

Concluding remarks

The concluding remarks of the workshop were given by Dr. Marina Geli, Minister of Health Catalanian Government, Spain, who underlined the successful collaborative nature of this important endeavour. Collaboration in promoting voluntary non-remunerated blood donation proved to be fruitful starting with the first WBDD event in 2004. There is a lot of enthusiasm to face the challenges to be overcome and there are resources and expertise that could assist in building national blood donor programmes in the countries. Voluntary non-remunerated blood donation may not be achieved overnight but it can be the result of many small advances, –based on learning from experience.

In the blood donation field, Catalonia has clearly promoted 100% voluntary unpaid donation, educating children to become blood donors once they become eighteen and fostering a culture in which it is a social stigma not to donate blood. The existing network of small autonomous blood donor associations is encouraged to compete in promoting safe blood donation.

Particular attention has been also given to the blood transfusion service. Based on professional consensus, efforts concentrated on one blood centre which became a reference for Chagas Disease, and widened its scope to include tissue and cord blood banking and research.

Dr. Geli underlined that Catalonia is committed to continuing its collaboration with WHO, and the organizing of an Institute for Health Studies is considered. The Institute will have a global scope of work and will include studies relating to the promotion of voluntary blood donation.

Recommendations

Stemming from the meeting's discussions, and participants' feedback the following recommendations for action were compiled.

To participants

- The information/ knowledge gained and lessons learned during the entire event will be shared with national health authorities, professional associations, other stakeholders including colleagues at their working place. This should lead to further discussions on local steps required to increase safe blood donation and completely phase out paid and/ or replacement blood donation.
- A national fact sheet and other information leaflets will be considered for development for advocacy purposes, and promotion/ information campaigns will be supported through close partnership with the media. The momentum of the World Blood Donor day celebrations and links with national/local events will be used as part of the promotion/ information campaigns.
- Cooperation with key partners and stakeholders locally will be strengthened, working on the development of common interventions fostering safe blood donation. Networking between meeting participants will further enable the potential development of inter-country projects towards 100% voluntary non-remunerated blood donation.

To National Health Authorities

- National dedicated strategies and programmes for safe blood donation need to be developed/ updated based on KAP studies, so that planning is shaped to respond to locally identified needs. A specific budget dedicated to education to and promotion of voluntary non remunerated blood donation should be secured.
- Training programmes for staff working on blood donor promotion and retention, as well as dedicated structures in the blood services need to be developed, as well as the necessary equipment for reforming mobile blood collections on a regular basis. A unified electronic database and unique donor register are considered key issues in ensuring donor and patient safety.
- Inter-sector collaboration is required (i.e. with Ministry of Education, Culture, Youth, Sports etc) to support active education and propaganda for 100% voluntary non remunerated blood donation and dedicated public awareness campaigns.

To WHO

- Advocate and assist National Health Authorities to strengthen/ develop nationally shaped strategies for achieving 100% voluntary non-remunerated blood donation.
- Technical support in conducting KAP surveys to design evidence based interventions, as well as training of staff and volunteers for education to, promotion and retention of regular unpaid donors.
- In collaboration with other international stakeholders support networking, information sharing and coordinated interventions at national and regional level to strengthen safety and availability of blood supplies, coming from 100% voluntary non-remunerated donors.

Annex 1

PROGRAMME

| Day 1: 16 June 2010 | | |
|--|--|--|
| 09:00 - 09:30 | Registration | |
| Opening Session | | |
| 09:30 - 10:00 | Welcome and opening addresses | Mr David Elvira, General Director of Health Resources of the Government of Catalonia Dr Neelam Dhingra, WHO Headquarters Dr Valentina Hafner, WHO Regional Office for Europe Mr Peter Carolan, IFRC |
| 10:00 - 10:30 | Introduction of participants Objectives of the consultation Adoption of the agenda and programme of work | Dr Neelam Dhingra |
| 10:30 - 11:00 | Coffee break | |
| 11:00 - 11:30 | Global perspectives on voluntary non-remunerated donation of blood and blood components | Dr Neelam Dhingra |
| 11:30 - 12:00 | European perspectives on voluntary non-remunerated donation of blood and blood components | Dr Valentina Hafner |
| 12:00 - 12:30 | Discussion | |
| 12:30 - 14:00 | Lunch break | |
| Session I: Challenges, Barriers and Lessons Learnt in Achieving 100% Voluntary Non-remunerated Donation of Blood and Blood Components | | |
| 14:00 - 15:30 | Country presentations (status reports) | Presentations from participant countries |
| 15:30 - 16:00 | Coffee break | |
| 16:00 - 17:30 | Country presentations (status reports) | Presentations from participant countries (ctd) |
| 17:30 - 18:00 | Conclusions of the day | |

| Day 2: 17 June 2010 | | |
|--|--|--|
| 09:00 - 09:30 | Introduction to Group work I on challenges, barriers and lessons learnt in achieving 100% voluntary non-remunerated blood donation | Moderators: Dr Neelam Dhingra Dr Jose-Manuel Cardenas |
| 09:30 - 10:30 | Parallel group work sessions | Participants divided into three groups |
| 10:30 - 11:00 | Coffee break | |
| 11:00 - 12:00 | Presentation of group work and discussion | Participants & facilitators |
| 12:00 - 13:30 | Lunch break | |
| Session II: Foundations of a System for Voluntary Non-remunerated Donation of Blood and Blood Components: Catalan Experiences | | |
| 13:30 - 13:50 | Current vision of the blood donation in Catalonia and the relationship with the Bank of Blood and Tissues | Dr Antoni Dedeu, Health Department, Government of Catalonia |
| 13:50 - 14:10 | Altruism and wilfulness, from the heart to the reason: The Catalan model | Dr Joan R. Grífols, Bank of Blood and Tissues |
| 14:10 - 14:30 | Role of the blood donors associations. Voluntary blood donation. | Mr Òscar Velasco, Catalan Red Cross Mr Albert Navas, Catalan Federation of Blood Donors |
| 14:30 - 14:50 | How to approach blood donors through digital activism and social networks | Mr Josep Salvatella, RocaSalvatella |
| 14:50 - 15:30 | Discussion | |
| 15:30 - 16:00 | Coffee break | |
| Session III: Global, European and Central Asian Initiatives for 100% Voluntary Non-remunerated Donation of Blood and Blood Components | | |
| 16:00 - 16:30 | WHO initiatives | Dr Neelam Dhingra Dr Valentina Hafner |
| 16:30 - 16:50 | IFRC initiatives | Mr Peter Carolan |
| 16:50 - 17:10 | CoE initiatives | Dr Miguel Lozano |
| 17:10 - 17:30 | CDC/ central Asian republics initiatives | Ms Nazira Usmanova |
| 17:30 - 18:00 | Discussion | |
| 18:00 | Conclusions of the day | |

| Day 3: 18 June 2010 | | |
|---|--|---|
| Session IV: Country Strategies and Plans for the Development/Review of National Programmes for 100% Voluntary Non-remunerated Blood Donation | | |
| 09:00 - 09:30 | Key elements of a national programme for 100% voluntary non-remunerated blood donation | Dr Neelam Dhingra |
| 09:30 - 10:00 | Introduction to Group work II on development of country action plans | Moderators: Dr Valentina Hafner Dr Jose-Manuel Cardenas |
| 10:00 - 10:30 | Coffee break | |
| 10:30 - 12:00 | Parallel group work sessions | Participants working as country team |
| 12:00 - 13:30 | Lunch break | |
| 13:30 - 15:00 | Presentation of group work and discussion | Participants & facilitators |
| Closing Session | | |
| 15:00 - 15:30 | Emerging considerations and closure of the event | Ms Marina Geli, Minister of Health of the Government of Catalonia Dr Neelam Dhingra, WHO Headquarters Dr Valentina Hafner, WHO Regional Office for Europe Mr Peter Carolan, IFRC Mr David Elvira, General Director of Health Resources of the Government of Catalonia |
| 15:30 | Group photograph | |

Annex 2

CONCEPT PAPER

Background

Availability and safety of blood and blood products remains a major concern in many countries around the world. Voluntary non-remunerated donation of blood and blood components is recognized as a cornerstone of a safe and sustainable national supply of blood and blood products sufficient to meet the transfusion requirements of patients. The importance of voluntary non-remunerated donation has been reaffirmed by several World Health Assembly resolutions (including WHA28.72 and WHA58.13).

The WHO Global Consultation on Universal Access to Safe Blood Transfusion held in Ottawa in 2007 also confirmed that the difficulties faced by many countries in achieving blood supplies based on 100% voluntary non-remunerated blood donations are a major constraint to the availability of adequate transfusion therapy.

The follow-up WHO Global Consultation on 100% Voluntary Non-remunerated Donation of Blood and Blood components held in Melbourne in 2009 brought together experts in transfusion medicine, policy makers and government and non-government representatives from 40 countries across WHO regions. Participants recommended that WHO should provide technical support and capacity building to Member States with regard to the development of national voluntary non-remunerated blood donor programmes, including the development of concrete national action plans in priority countries.

There is wide variation in the rates of non-remunerated voluntary blood donation, both between and within WHO regions. Until 2007, 57 countries globally reported collecting 100% of their blood supplies from voluntary unpaid donors, while 42 countries globally collected less than 25% of their blood supplies from voluntary unpaid donors.

Within the Europe and Central Asia, several countries still have low rates of non-remunerated voluntary blood donation and are therefore considered priority countries for targeted capacity building in this field.

WHO Training Workshop

A 3-day Training Workshop on "Achieving 100% Voluntary Non-Remunerated Blood Donation" for priority countries in Europe and Central Asia is being jointly organized as a collaborative activity by WHO-Headquarters/Geneva, WHO-Regional office for Europe/Copenhagen, the Health Department of the Government of Catalonia, Spain and the International Federation of Red Cross and Red Crescent Societies (IFRC). The training workshop will be held from 16-18 June 2010 in Barcelona, following the World Blood Donor Day global event on 14 June 2010. The Health Department of the Government of Catalonia will be responsible for local coordination of the workshop.

The joint WHO/IFRC publication "Towards 100% voluntary blood donation - A global framework for action" as well as the recommendations of the global consultations held in Ottawa and Melbourne will be used as a basis for the training workshop. This event will also draw on the existing experience and specificities of related European initiatives, such as the South East European blood safety project. The working methodology of the workshop will include country presentations, lectures, group work and the development of country plans.

A total of up to 50 participants will be invited to the workshop: up to 3 participants each from about 15 priority countries, as well as about 2-3 facilitators. Invited countries will be asked to nominate national blood donor managers and other high-level delegates involved in establishing systems for voluntary blood donations. Facilitators will include WHO staff as well as external consultants. Simultaneous translation between English and Russian language will be provided.

Priority countries for participation in the workshop have been identified based on the WHO Global Database of Blood Safety, observations on country visits, and country requests. The key indicator used for selection of participating countries is the rate of voluntary non-remunerated blood donation, while also taking into account the total blood donation rate in the country. Based on this analysis, the following priority countries are proposed: 10 Newly Independent States (NIS): Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Tajikistan, Turkmenistan, Ukraine and Uzbekistan as well as 5 Central and Eastern European (CEEC) countries: Albania, Lithuania, Bosnia and Herzegovina, Serbia, and Montenegro. Some of the proposed countries have already initiated the design of national programmes for 100% voluntary blood donation in recent years, therefore benefit from recent experiences and lessons learnt in this process is expected.

Objectives of the Workshop

1. To provide an opportunity for the sharing of experience related to voluntary non-remunerated donation of blood and blood components in participating countries
2. To identify the needs, challenges and priority activities in the development of national programmes for 100% voluntary non-remunerated donation of blood and blood components
3. To design, review or revise, as appropriate, country strategies and plans for the development of national programmes for 100% voluntary non-remunerated donation of blood and blood components in participating countries.

Expected Outcome

The expected outcome of the workshop is for participants to understand the barriers and challenges in achieving 100% voluntary non-remunerated donation of blood and blood components, and learn from the experiences of other countries. The workshop will thereby enable participants to design, review or revise, as appropriate, strategies and plans for the stepwise development of these programmes in their own countries.

Ultimately, it is expected that implementation of the training provided in the workshop will strategically contribute to ensuring safe and sustainable supplies of blood and blood products to meet the transfusion requirements of patients in need, in participating countries.