Increasing Blood Availability and Providing the Highest Donor and Patient Safety in Transfusion Therapy in Emergency Special Circumstances Situation in Albania

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National Policy

- The supply with safety and qualitative blood collected by voluntary non remunerate regulate blood donors is declared as the priority of MoH.
- Provision of safe and adequate blood supply is ultimately a government responsibility.
- MoH is competent authority which defines the Blood transfusion policy and programs transfusion activities at national level; for national legislation that approves all regulations and guidelines regarding transfusion.
- □ In this context, MoH has undertaken very significative organizative, financial and technical interventations

Challenges in developing the blood service in line with EC directive requirements

Challenges in introducing new legislative approach.

Challenges in reorganization of the service

Legislative field

- Adoption of the current legal and regulatory framework with the EC Directive and Recommendations of CE.
- ✓ The new law Nr. 9739, dated 21.05.2007 "On the blood transfusion service in the Republic of Albania", amended which defines the principles and basic rules of transfusion service activities and the organization of this service in the Republic of Albania.
- This new Law was adopted with EU Directive 2002/98/EC, and with WHO recommendations in the field of blood transfusion.
- ✓ There are actually developed and approved all guidelines and regulations predicted by the Law, regarding donor management, quality systems, hemovigilance, accreditation and inspection in conformity with EU Directives 2004/33/EC, 2005/61/EC, 2005/62/EC.
- ✓ All Guidelines and Regulations predicted by the new Law are approved by order of MoH, are valid at national level and are distributed to each medical institution from MoH.

Legislation field

Measures for establishing a voluntary unpaid donation system

- ✓ National Strategy for Safe Blood Transfusion launched in 2006, it update is in process
- National Voluntary Blood Program, with activities, which is a part of regional initiative of Stability Pact. This document is approved from National Blood Committee and By Decree of MoH No 241, dated 15.04. 2009.
- Agreement with the National Council of Televisions, that will make possible to transmit all spots on blood donation free of charge since 2008.
- ✓ Establishment of a policy for reimbursing the partner involve in promotion of vnrbd. Was approached the legal bases for financial support and continuous cooperation with all partners involved in the promotion of voluntary blood donation. Partner organizations are financed from the Ministry of Health, since 2009.
- Notification of serious adverse events and reactions.
- Define the Competent authority for inspection of transfusion service.
- Establish the Competent authority for authorization and accreditation.

Interventions carry out for achieving the collection of blood from VNRBD

- Increase the number of new voluntary non-remunerated blood donors by aiming self-sufficiency in blood and his components.
- □ We have interrupted the admission of the paid first time blood donors since 2009.
- Gradually phase out paid and family replacement donation and replace them with voluntary non remunerated donations from low-risk population.
- □ Maintain first time VNBD and return them in regular VNBD
- Mobilization of the partner organizations in promoting voluntary non-remunerated blood donation (Red Cross, Organization of Voluntary Blood Donors).
 - Define convention with each of partner organizations
 - Organize and elaborate policy for incentives
 - Create e unit for promotion
 - Recruit a national coordinator

□ National blood transfusion committee which is technical adviser to the Minister of Health for policies regarding transfusion field.

NBTS (National Blood Transfusion Service) is a government-

oriented service financed from the state budget through the MoH. The activity of the NBTS is regulated by law Nr 9739 amended, approved by the Parliament on 21.05.2007.

Hospital transfusion Committees, in regional hospital

- NBTS in Albania is in the full process of restructuring towards national coordination, and to comply with European Union (EU) requirements, WHO and Council of Europe (CoE) recommendations and guidelines.
- NBTS in Albania includes National Blood Transfusion Centre (NBTC) .
 32 hospitals blood banks.
- ✓ NBTC and 5 hospitals blood banks are located in Tirana.
- 12 blood banks are located in regional hospitals (according to administrative division)
- 15 blood banks in districts hospital.

- **NBTC** is the technical responsibility
- ✓ for implementation of guidelines and regulations in the field of blood transfusion at national level.
- ✓ for establishing same level of blood safety at national level
- ✓ for developing the annual program of self-sufficiency at national level and informing MoH on needs for import or export of blood and its products.
- ✓ Other important activities of NBTC are procurement of consumables centrally for the whole country by assuring same level of quality for consumables at national level, blood donor management, blood collection, testing, processing, blood management, medical expertise.
- education of personnel, curriculum preparation for students of Medicine Faculty.

- *NBTC performs:* all activities of blood service from selection of BD to distribution of blood and blood components to hospitals. The immunohaematology laboratory of NBTC is considered as reference for the whole country), virological tests for all blood donations was centralized in Tirana.
- Other important activities of NBTC are control of all blood banks if the existing legislation and regulation are implemented properly, medical expertise, education of personnel, coordination of activities and cooperation between blood banks.

Blood bank I regional hospital and Tirana are engaged in: collecting blood, performing immunohaemotology tests, according to the guidelines available, patient services, storage and distribution of blood.

Blood banks of the districts perform: collection, immunohaematology tests for donors and patients, patient services, storage and distribution of blood and blood components.

- □ There **is a National Coordination** for voluntary non-remunerated blood donation activities in NBTC that actually manages and coordinate all activities and data related to VNRBD.
- □ **Centralization of the testing** for infection diseases transmitted by blood transfusion in NBTC in Tirana since 2010.
- □ The **immunohaematology laboratory** of NBTC is considered as reference for the whole country.
- Centralization of the processing of blood in 5 regional blood banks (Tirana, Vlora, Shkodra, Korça and Kukes),
- 15 hospital blood banks (collection, distribution and patient services)
 11 hospital blood bank (distribution and patient services)
- □ From the five predicted processing centers actualy there are only two equipped with centrifuges able to process blood, but in order to centralize and to have regional processing centers also appropriate infrastructure is needed and this is still lacking.

Blood supply management in special circumstances

- Albania have legal and regulatory provisions regarding emergencies, but these do not include blood supply management.
- A national, multisectoral committee, empowered to manage emergency situations, exists.
- Albania is currently restructuring its emergency medical service, with the objective of improving the efficiency and outcomes of the system.
- In normal circumstances, emergency services are available through both public and private services.
- Albania have inventory lists of critical equipment and material for laboratory diagnosis and treatment for emergency situations under normal circumstances.

Blood supply management in special circumstances

- BTS has strategic stock of blood components. The stock (number of units per blood group, as well as type of blood components) is defined based on the prevalence of blood groups in the population and the use of blood component units on three to five days. But the blood components stock is usually insufficient to cover emergency situations, due to the frequent lack of supplies.
 A provision of O Rh negative red blood cells is part of this strategic stock.
- The strategic stock also includes medical devices for blood collection, processing and testing.
- Usually, the renewal/discard of the strategic stocks of blood components is based on the related shelf life.
- The Albanian information system provides available data from the national blood donor register and blood supplies, and has a devoted software covering blood service activities for the Tirana region only.

How the BS operated in emergency situations under the current conditions

- □ The transfusion services have been able to respond to their emergency situations, regardless of the need to improve the current conditions.
- BS faced problems in terms of general coordination, a lack of transport coordination and communication, inadequate blood supply and proper logistics in this situation.
- The problems related to the blood service capacity led to a lack of blood components/derivatives, while the absence of a communication strategy to blood donors contributed to a great afflux of donors who could have helped generate additional blood.
- □ The situation was solved with the goodwill of the population, professionals and support from neighboring countries.

Blood donors/donations and annual demands

- According to an evaluation of needs done only in Tirana it has been concluded that about 80% of needs are covered. Related to the fact that Tirana treats all chronic anemia's at national level, and to the fact that all types of specialized surgeries are performed only in Tirana, this value can be valid more or less for the whole country.
- According to this, in order to meet the needs we should collect about 35 000 donations that means 5000 donations more from what we actually collect. (20 donations/1000 inhabitants)
- Actually have 10 donations/1000 inhabitants

Blood donors/donations and annual demands

- The consolidation of voluntary, non-remunerated blood donation is still in progress.
- Improve the quality of blood donors.
- □ Increase the number of blood collected units from VNBD.
- We mostly have first time donors, but we haven't a program for turning them in repeat or regular donors.
- During 2009 the total number of collections at national level has been
 29232 blood donation .
 - 64 % family replacement
 - 26 % voluntary-non-remunerated
 - 10 % paid donors
- Percentage of first time donors 78.5%

Blood collection 2009-2013



Structure of Blood donation



Situation, collection 200-2013



Situation, collection of voluntary nonremunerated donations



Infective marker

2011

- HBsAg (1428) 5.5%
- HCV (179) 0.69%
- HIV (8) 0.03%
- Sifilis

 (18)0.06%

2012

- HBsAg (1407) 5.1%
- HCV (228) 0.8%
- HIV (5) 0.02%
- Sifilis (42) 0.15%

2013

- HBsAg
 - (944) 4.56%
- HCV
 - (183) **0.88%**
- HIV
 - (10) 0.04%
- Sifilis (42) 0.16%

Infectious agents in first time donors



Clinical used of blood



Foresee to future

- Drafting legal framework and national guideline/regulatory regarding emergencies and blood supply management.
- Drafting the communication strategy to blood donors, transport and coordination in emergencies.
- Establish a program for returned the family blood donors in VNRBD and return a first time VNRBD in regular donors
- Development of Regional Units for promotion, near the Regional Blood Transfusion Centers.
- Introduce the NAT test for screening of blood donors for HIV, HCV, HBsAg.

Thank you