

Swiss Red Cross



An international cooperation project of the Swiss
Red Cross in the field of transfusion medicine

Strengthening the blood transfusion
service in the Republic of Moldova

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- **Background.**
- The Moldovan republic has been confronted and still suffers from important socio-economic and political difficulties.
- The Moldavian Blood Transfusion Service (MBTS) is heavily confronted with limited resources and difficulties in having access to technologies and products compatible with modern standards of quality and safety.
- The Moldovan government has undertaken a considerable effort to achieve a standard of quality and safety of the BTS compatible with was is currently required at European level.
- In this effort it as been supported by numerous public and private organizations
- The Swiss Red Cross since 2014 has decisively supported the Moldovan blood transfusion service with the aim of improving the safety, availability and quality of blood products according the EDQM standards

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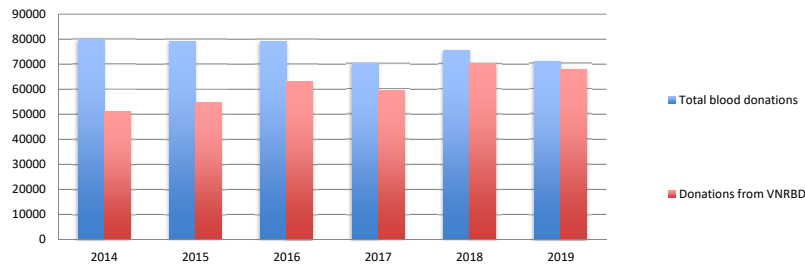


- **Purpose and methods of the study.**
- Collect and examine the main indicators of performance presented by the MBTS between 2014 and 2019.
- In order to assess whether the commitment of the management of this service, of the Moldovan government and of the medico-scientific societies of the country, profuse in recent years, with the close collaboration and support of the Swiss Red Cross, have been able, and to what extent, to achieve the set objectives.
- As the subject of this presentation we have considered only some of the main indicators, however sufficient to allow an evaluation

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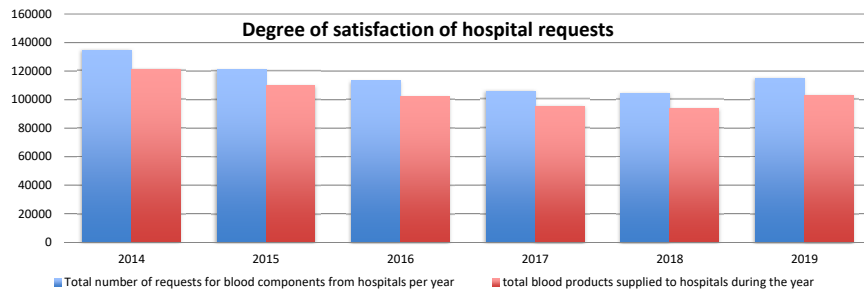


Voluntary not remunerated blood donors in relation to the total number of donors



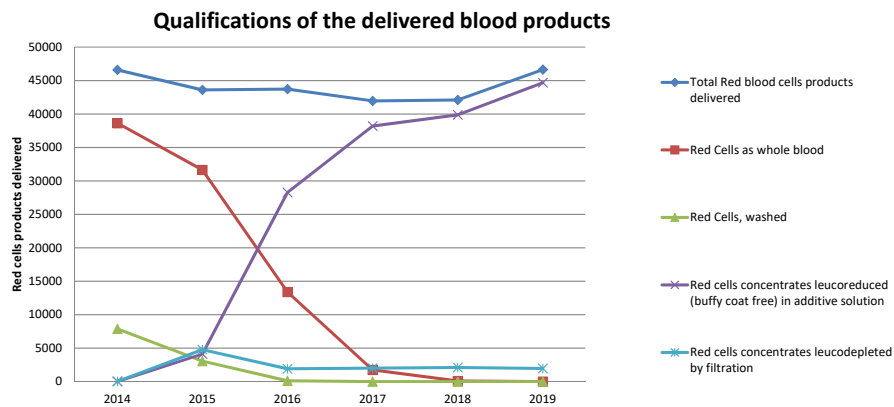
Thanks to the considerable effort of the MBTS, the MoH, public and private organizations and adequate training of recruitment managers, the number of blood donations from VNRBD increased from 64% in 2014 to 95% in 2019 of the total number of blood donations

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Slight reduction in the number of blood donations mainly due to the policy of recruiting VNRBD and at the same time a reduction in requests blood products due to the introduction of protocols of the rationale use of blood products. The degree of satisfaction with requests remained stable at around 90%

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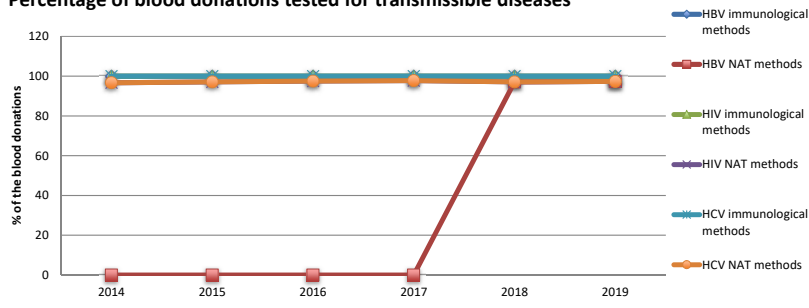


An important result was obtained with the preparation of leuco-depleted blood products (buffy-coat free) which completely replaced the transfusion of whole blood

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Percentage of blood donations tested for transmissible diseases

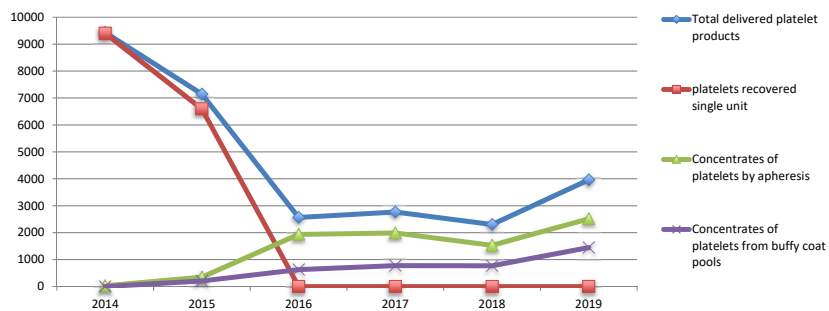


With the introduction in 2018 of the latest generation technologies for NAT tests (PCR Real time) and immunological analysis (ECLIA), all blood donation are now controlled with methods compatibles with international standards.

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Qualification of delivered platelet products

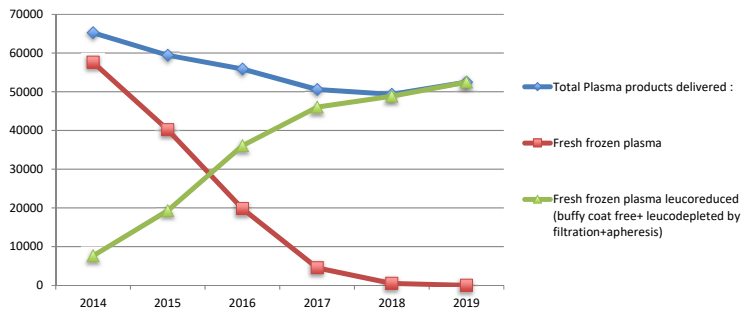


Even for these products the result was very satisfactory with the complete introduction of apheresis preparation or products from pool of buffy coats

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Qualification of the plasma products supplied to the hospitals



Starting from 2017, fresh frozen plasma units supplied to hospitals have been obtained from buffy coat free separation of whole blood or apheresis procedure with leuco-depletion

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Nationals clinical protocols:

- In 2016, 6 National Clinical Protocols in the management of haemorrhages and post transfusion reactions were developed, edited and distributed.
- in 2018, all 6 National Clinical Protocols in the management of bleeding and post-transfusion reactions were reviewed with the editing of the short (pocket) variants of them and the algorithms for managing post-transfusion reactions with the distribution to all medical-sanitary institutions.

In 2016 and 2018 the main Moldovan medical-scientific societies developed and distributed in all clinical departments 6 clinical protocols on the correct use of blood products in the main clinical conditions, also providing for the training of medical staff at national level with adequate and regular refresher courses

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Legislative acts issued by the government on transfusion medicine:

- Law on blood donation and blood transfusion no. 241 of 20.11.2008
- Law on the protection of personal data no. 133 of 08.07.2011,
- Government Decision no. 1240 of 27.10.2006 "On the approval of the norms of insurance with food, medicines and consumables of the patients (adults and children), as well as the norms of compensation of the blood donors and their nutrition";
- Government Decision no. 657 of August 23, 2017 "On the approval of the National Program for transfusion security and self-insurance of the country with blood products for the years 2017-2021".
- Government Decision no. 284 of May 29, 2019 "To approve the changes that are made in the annexes no. 1 and no. 2 at the Government Decision no. 657/2017 regarding the approval of the national Program for transfusion security and self-insurance of the country with blood products for the years 2017-2021";
- Government Decision no. 970 of 18.10.2010 "For the approval of the Regulation regarding the granting of social guarantees to the permanent voluntary donors of blood and / or blood components"

Since 2008 The Moldovan government and its Ministry of Health have already issued numerous legislative acts for the promotion, regulation and control of the transfusion activity, from the recruitment of blood donors to the production and control of the blood products and their clinical use in the country's hospitals

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Support from the Swiss Red Cross to the Moldovan Blood transfusion Service

a) Audits and training visits by experts from the SRC at National Blood Transfusion Service in Moldova	63 days
b) Training visits from Moldovan technical staff in Switzerland	37 days
Total investment from the Swiss Red Cross International Cooperation for the aid programmes to the Moldovan Transfusion Service from 2014 to 2019	2.5 M. CHF

Between 2014 and 2019 and still currently, the Swiss Red Cross has provided support and cooperation to the Moldovan Transfusion Service through training visits by Swiss experts, training periods for Moldovan technical personnel in Switzerland, providing documentation and constant availability for internet contacts as well for the execution of external quality controls in Swiss laboratories for the laboratory activity carried out in Moldova.

Between 2014 and 2019 an amount of CH 2.5 millions was made available for these development aid programs in Moldova.

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Conclusions

The example of the aid programme of the Swiss Red Cross international cooperation for the Moldovan Blood Transfusion Service indicates that the international aid and collaboration for countries with socio-economic difficulties can lead to concrete results only if at the same time the political, medical, and scientific authorities are ready and determined to commit themselves to a rationale and well organized employment of these aids

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