



Experiences & Challenges to Start Iranian National Rare Donor Program

Iranian Blood Transfusion Organization

Mostafa Moghaddam MS, MT (ASCP) BB

Head of Immunohematology Reference Laboratory





Experiences & Challenges to Start Iranian National Rare Donor Program

10 important steps to ensure success

Packaging & Reliable Transportation

Comprehensive Information Technology

Engineering & Technical maintenance

Facility and Environmental

Public Relation Department Collaboration

Employee Awareness and Communication between Regional blood center

Accessibility to Rare anti-sera , Equipments & Consumables

Technologist Education & Training in advanced Immunohematology

Financial & Administrative support by Higher Management

Situation analysis and justification of program

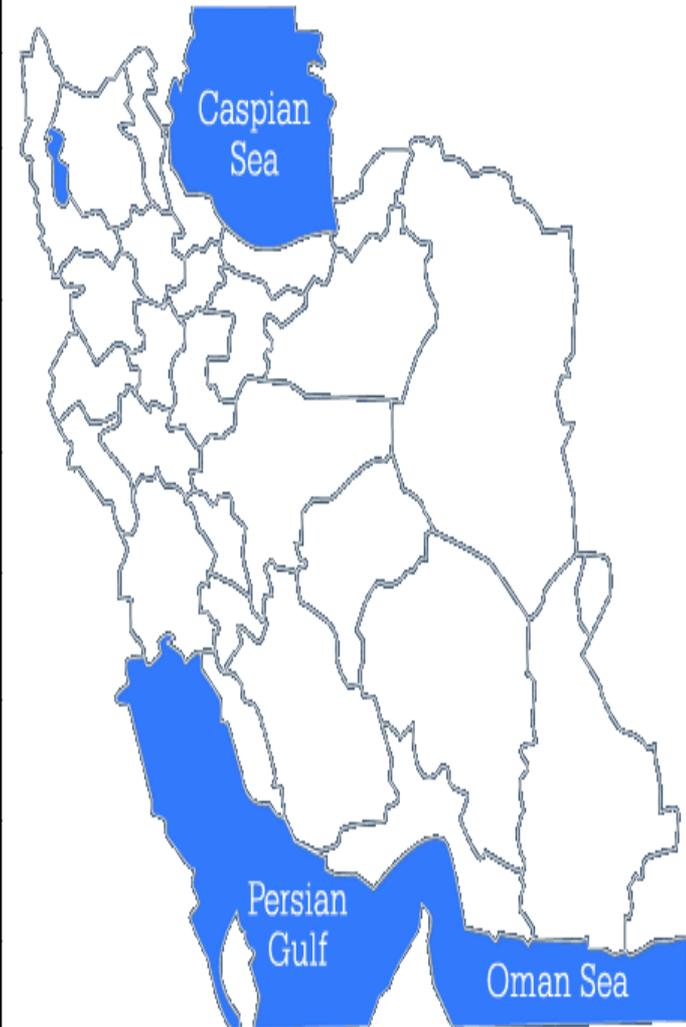


Experiences & Challenges to Start Iranian National Rare Donor Program

Situation analysis , Demographic & Ethnic profile

Persian	51%
Azeri	24%
Gilaki, mazandrai	8%
Kurd	7%
Arab	3%
Lur	2%
Baloch	2%
Turkmen	2%
Other	1%

Population	75000000	2010
Provinces	31	2012
Total number of blood donation	1986992	2010 2011
Per capita donation (1000)	26.2%	2010 2011
HIV (western blot)	0.004%	2010 2011
HBV (Neutralization)/ (HBcAb)	0.20%	2010 2011
HCV (Riba)	0.061%	2010 2011
HTLV khorasan (western blot)	0.18%	2010 2011
RPR (FTA-ABS)	0.001%	2010 2010

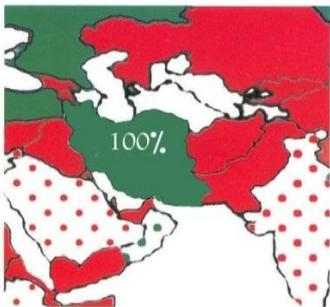




Experiences & Challenges to Start Iranian National Rare Donor Program

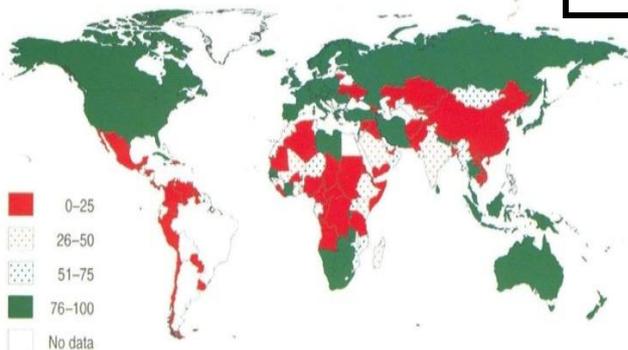
Volunteer Whole Blood	100 %
Autologous	Per- request
Replacement	0
Directed	0

Total number of Blood Centers/ Blood Donation Centers	218
Blood Donation Centers	127
Blood Collection & Preparation Centers	37
Blood Centers	54
Provincial Centers	31
Regional & Educational Centers	9



Donations from

New donors	Lapsed donors	Regular donors	Family Replacement donors	Paid donors	Autologous donors
27%	23.7%	49.31%	0.0%	0.0%	Per request





Experiences & Challenges to Start Iranian National Rare Donor Program

Financial & Administrative support by Higher Management

Willingness for allocation of sufficient budget for initial establishment and continuous improvement of rare donor services of Iranian National Rare Donor program





Experiences & Challenges to Start Iranian National Rare Donor Program Technologist Education & Training in advanced Immunohematology

Emphasis on continuous education, training and improving knowledge of technologists in special serology from various provincial blood donor centers

Promoting importance of services provided to patients with difficult samples by rare donor program resulting in prevention of transfusion related adverse effect

Concern for lack of experiences to use specific advanced special immunohematology procedures

Concern for technical and human errors in reporting test results

Need for contact and collaboration with international Immunohematology Reference Laboratory for technical help and testing confirmation



Experiences & Challenges to Start Iranian National Rare Donor Program

Accessibility to Rare anti-sera , Equipments & Consumables

Access to expensive
internationally
accepted anti-sera

Availability of automated
machines, supplies and
consumables for
glycerolization and
deglycerolization of rare RBCs



Experiences & Challenges to Start Iranian National Rare Donor Program
Employee Awareness and Communication between Regional blood center

Emphasis on employee awareness and effective communication between countries regional blood donor centers and IBTO's IRL

Promoting employee awareness on importance of rare donor program

- Donor registration

- Donor interviewer

- Component preparation

- Component storage

- Packaging & shipment of collected rare blood



Experiences & Challenges to Start Iranian National Rare Donor Program Public Relation Department Collaboration

Selection of talented & people oriented employees

Continuous pleasant and good public relation skills by employees in rare blood donor program

Offering correct & complete answers to rare donor questions & concerns

Need to support rare donor moral feeling / how their blood can help patients

Continuous contact with rare blood donor to update personal information & help for retention of rare donor

Close collaboration between IBTO public relation department and IRL

Rare donor interview in local and national media for recognition of rare donors and public awareness

Meeting of rare donors , patients and surgical team in National & International blood donor days

Establishing a National Rare Blood Donor day



Experiences & Challenges to Start Iranian National Rare Donor Program

Facility and Environmental

Concern for access to sufficient storage area and good environmental condition

Sufficient number of -80°C standard freezer for longer blood storage

Empty back up freezer

Controlled access area

Temperature controlled environment (-18°C-22°C) by central heating and cooling system

Central 24 hour temperature control alert system for any electrical failure



Experiences & Challenges to Start Iranian National Rare Donor Program

Engineering & Technical maintenance

Access to skilled technical person for maintenance of blood group automated machines , RBC processor machines, freezers, instruments and calibrated blood bank centrifuges

Availability of equipments and spare parts from country of origin



Experiences & Challenges to Start Iranian National Rare Donor Program Comprehensive Information Technology

Producing a comprehensive
National Rare Donor
software (Mak System) for
rare donor personal information
record and phenotype database
archiving complete serologic test
results
blood inventory management

MAK-SYSTEM
INTERNATIONAL GROUP

**Blood Traceability
and Transfusion Safety
In Hospitals**

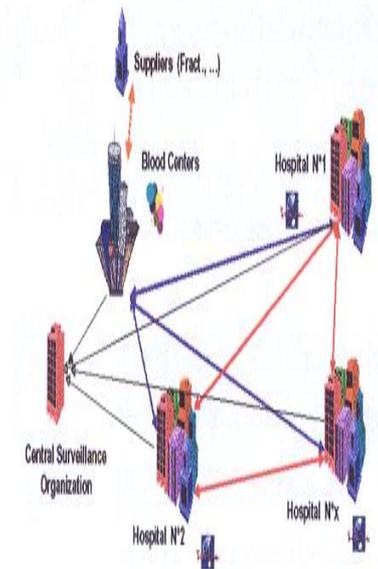
TraceLine

ISBT 128
Supported

ISO 9001-2000
Registered

HEMOVIGILANCE
PHARMACOVIGILANCE
PATIENT LAB ACTIVITIES (LIMS)

----- Blood Product & Manufactured Blood Component -----





Experiences & Challenges to Start Iranian National Rare Donor Program Packaging & Reliable Transportation

Difficulty in transporting
and delivery of requested
rare blood to hospital
Large country with long
distances
Lack of experienced private
company for blood
transportation
Delivery by Air and Land
(bureaucratic procedures /ticket
purchase / cancelation of flights/ flight
delays)

