

ASPECTS REGARDING BLOOD DONORS' MANAGEMENT

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Introduction: Local, regional or national self-sufficiency – central objective of any national transfusion system – depends on the existence of an adequate blood donors' panel with an increased retention percentage, maintained through an active and sustained recruitment and retention program. The achievement of self-sufficiency in blood and blood components is still considerably relying on the degree of voluntary presentation of prospective blood donors to give blood, as long as computerized information system to manage the blood establishment activity, a national donors' registry and a coherent promotion program are lacking. The pressure caused by the increasing hospital request for blood and blood components determines the physician in charge to admit regular donors up to the maximum allowed number of donations; this might lead to secondary effects on their health, with consecutive reduction of active donors' panel, even though the compliance with the selection standard is ensured.

The paper introduces a new perspective on donor selection, by applying modern principles of donors' management and approaching blood donation as a medical act, with possible clinical and biological consequences on donor's health.

Material and methods: Post-donation physiologic recovery was evaluated by measuring blood pressure, puls and iron status in 690 eligible donors who completed the donation. The group consisted of 141 first time donors (96 men, 45 women) and 549 repeated and regular donors (421 men, 121 women). The following parameters were measured: complete cell blood count, serum iron level, total iron binding capacity, saturation index, ferritin, eritropoetin. Predictive values to identify iron deficiency in this group with complying hemoglobin level were evaluated.

Results: Prevalence of different iron imbalance stages was calculated. Based on the results, a proposal for a new donor selection algorithm is presented; it foresees to identify donors at risk to develop or worsen a negative iron imbalance status, by multidirectional preventive measures (anamnesis, clinical and biological exam, counseling, monitoring) additional to the current standard. Laboratory tests proposed are compatible with existing equipment in blood establishments.

Conclusion: Achieving self-sufficiency in blood and blood components in Romania represents a challenge on medium and long term for the entire society. It is a precondition to ensure transfusion therapy without syncope, especially in the current socio-economic context, marked by the lack of any nationally sustained program for education and promotion of voluntary blood donation. Given the evidence, care for donors' health should be one of the major objectives for competent authority and professionals in the transfusion field, in the frame of a coherent policy to preserve the existing active donor population. Compliance with selection standard, supported by personalized evaluation of each prospective donor and consecutive adaptation of donations number and frequency in accordance with his own recovery capacity should become the routine practice in any blood establishment.