

Blood services in the Region of the Americas

José Ramiro Cruz,¹

Guest Editor

In recent years, blood services in the Region of the Americas have progressed substantially. One noticeable achievement has been the availability of structured information concerning blood services in all the countries and territories of the Americas, without exception. Having that information makes it possible to know how blood services have evolved and also to identify weaknesses that still need to be addressed. Notable progress has also been made in terms of better screening of collected blood units for the markers of transfusion-transmitted infections. The countries of Latin America and the Caribbean reported that in 1999 they collected 5 996 591 units of blood. Of those units, 98.86% underwent screening for human immunodeficiency virus (HIV), 98.71% for hepatitis B virus (HBV), and 94.33% for hepatitis C virus (HCV). In 2001 screening levels reached were 99.91% for HIV, 99.87% for HBV, and 99.12% for HCV. That was in spite of the fact that the number of units donated in those countries had grown to 6 831 001, an increase of 14% over 1999. Even so, the quantity of blood in the entire Region of the Americas continues to be insufficient, and it is necessary to redouble efforts so that all the donated blood undergoes screening in order to avoid the transmission of infectious diseases.

Another achievement is related to a change in philosophy that has occurred in blood services and among the persons manage those services in the countries of Latin America and the Caribbean. While before there was an emphasis on the safety of the blood to be transfused, now professionals in the various countries have determined that the priority should be the sufficiency and availability of blood in order to treat patients in a timely manner and with the greatest safety and quality possible. The strategic poles for developing national blood donation systems are now quality assurance, promotion of repeat voluntary nonremunerated altruistic donation, hemovigilance, and valuing blood as a national resource.

This special issue of the *Revista Panamericana de Salud Pública/Pan American Journal of Public Health* aims to demonstrate the achievements of blood services in the Americas and the challenges that they still face. The issue also seeks to present a panorama of the entire Region of the Americas, the experiences of individual countries, and some methodologies that can be used as tools in facing the future.

In the first of the articles, the Regional Program for Laboratory and Blood Services of the Pan American Health Organization summarizes the basic components of a national blood system. These components are needed in order to guide the processes aimed at achieving sufficiency, safety, and quality in the blood for transfusion as well as making the best possible use of each country's resources. How these components are articulated in two countries can be seen in the piece by Ballester Santovernia on Cuba (p. 160) and in the one by Fuentes Rivera Salcedo and Roca Valencia on Peru (p. 165).

Donors are the keystone to an adequate supply of safe blood. The article by García Gutiérrez et al. (p. 85) reports on anthropological studies that were carried out in 15 countries in the Americas and summarizes the findings in two major subject areas: 1) the knowledge, attitudes, and practices of people with respect to donating blood and 2) how well prepared blood services are to attend to possible donors. The authors propose using the findings from the individual countries for public education programs that promote voluntary blood donation, as well as to introduce structural and functional changes into blood services that ensure good care for donors. The possibility of achiev-

¹ Pan American Health Organization, Laboratory and Blood Services, Washington, D.C., United States of America.

ing, in a relatively short period, major changes in the quality of donors is shown in the piece by Gonçalves et al. (p. 144). Those authors report that the proportion of all the donors at a major blood center in São Paulo, Brazil, who were voluntary altruistic donors grew from 20% to 57% over a space of 6 years. At that same center there was also a decrease in the number of donated blood units that had to be discarded, especially for repeat donors, according to the data presented by Salles et al. (p. 111).

The careful screening of blood units contributes to their safety, as is shown by León et al. (p. 117), who found that in the Municipal Blood Bank of Caracas, Venezuela, 0.2% of the samples were positive for human T-lymphotropic virus (HTLV) I and II. Tests to detect these two viruses are not on the list of tests mandated by the *Estándares de trabajo para bancos de sangre* [Work Standards for Blood Banks], a guide published by the Pan American Health Organization in 1999. However, those HTLV tests are among the ones whose evaluation is recommended in order to determine if they should be included in the list of required tests. Given that increasing the number of screening tests raises the costs for blood services, it is important to determine if the current screening guidelines are relevant, as Otani et al. did (p. 172). According to these researchers, a single enzyme immunoassay test, rather than two different concurrent ones, is adequate for screening for HIV in the population that they studied in Brazil.

The validity of the information obtained in blood services is closely tied to the processes for quality assurance, described by Franco (p. 176). Four articles in this special issue—two by Sáez-Alquezar et al. (pp. 91 and 129), one by Beltrán Durán and Ayala Guzmán on Colombia (p. 138), and one by Oknaian et al. on Argentina (p. 149)—provide a broad perspective on the processes of external performance evaluation, on both the Regional and national levels. It is clear that this kind of external evaluation helps to improve the accuracy of the results and makes it possible to identify weaknesses in blood systems. Of popular interests are the results from Colombia, where lower-quality results were found in blood banks having a smaller volume of work.

The papers written by Lobo et al. (p. 154) and Fontes et al. (p. 124) show that blood services in the Region are also centers for the treatment of patients with hemophilia, hemoglobinopathies, and other blood disorders, and not merely transfusion facilities. Developing transfusion guidelines in every health care center helps to ensure that each center's internal procedures are well organized. Salazar summarizes the principles of such guidelines in the last article in this special issue (p. 183).

The general situation with the availability, quality, and safety of blood in the Region of the America is summarized in the article by Cruz and Pérez-Rosales (p. 103). Besides presenting data on 42 countries and territories in the Americas, the piece shows the value of the information that national health officials provide to the Pan American Health Organization.