



WORLD HEALTH ORGANIZATION

EXECUTIVE BOARD
115th Session
Provisional agenda item 4.6

EB115/9
25 November 2004

Blood safety: proposal to establish World Blood Donor Day

Report by the Secretariat

1. Blood transfusion is an essential part of health care and the need for equitable access to safe blood is universal. Blood safety is integral to the WHO HIV/AIDS plan to accelerate the prevention of HIV infection¹ and to the achievement of Millennium Development Goals 4, 5 and 6.
2. Resolution WHA28.72 urged the development of national blood services based on the voluntary, nonremunerated donation of blood. Resolution CD41.R15 of the 41st Directing Council of the Regional Office for the Americas urged Member States to promote the development of national blood programmes and transfusion services, based on the voluntary, nonremunerated, and repeated donation of blood. Resolution AFR/RC51/R2 of the Fifty-first session of the WHO Regional Committee for Africa similarly urged Member States to promote voluntary and benevolent blood donation on a regular and permanent basis in order to meet the target set in the Regional Strategy for Blood Safety that, by 2012, at least 80% of blood donations in all countries of the African Region will be voluntary and nonremunerated. Resolution WPR/RC37.R15 of the Regional Committee for the Western Pacific in 1986 urged Member States to develop and improve their blood transfusion services at all levels and the Regional Committee, in several resolutions on sexually-transmitted infections and HIV/AIDS adopted at subsequent sessions, urged Member States to continue to reinforce blood safety programmes.
3. The collection of blood only from voluntary, nonremunerated blood donors from low-risk populations is a central strategic action to ensure the safety, quality, availability and accessibility of blood transfusion. Other elements include the quality-assured testing of all donated blood; the appropriate clinical use of blood to minimize unnecessary transfusions and their associated risks; and the national coordination of blood transfusion services, with quality systems in all areas, to ensure uniformly high standards and economies of scale.

¹ Investing in a comprehensive health sector response to HIV/AIDS, document WHO/HIV/2004.06.

MAKING BLOOD AVAILABLE AND ACCESSIBLE

4. Action is urgently needed to make good the shortfall and imbalances in national blood supplies revealed by data from the Global Database on Blood Safety.¹ Globally, more than 81 million units of blood are collected annually, but with only 39% in low- and medium-income countries where 82% of the world's population live. The average number of donations per 1000 population is three times higher in medium-income countries and 12 times higher in high-income countries than in low-income countries.

5. Globally, the effects of the shortage of blood are felt particularly by the following vulnerable groups for whom blood transfusion is often an essential part of their clinical management: women with complications of pregnancy, children with severe life-threatening anaemia, and trauma victims. Of the more than 500 000 maternal deaths each year, 25% are attributable to obstetric haemorrhage,² for treatment of which blood transfusion is invariably required. In children under the age of five who are anaemic, often as a result of malaria or malnutrition, transfusion support may be necessary in the management of severe life-threatening anaemia. Road traffic injuries rank second as cause of death and are a leading cause of morbidity for both sexes in the 5-29 year age group;³ intensive use of transfusions is frequently needed in the management of trauma.

6. Access to safe blood and blood products for all patients whose treatment depends on transfusion will result in reductions in morbidity and mortality. This access can be assured, however, only through a significant increase in the number of people who choose to donate blood regularly and on a voluntary basis, particularly in developing countries. Sustained, long-term campaigns to promote voluntary blood donation are essential.

MAKING BLOOD SAFE

7. The first and most important line of defence against transfusion-transmitted infection is the collection of blood from the safest possible donors. The transfusion of a unit of blood contaminated with HIV, hepatitis B or C viruses, *Treponema pallidum*, malarial plasmodia, *Trepanosoma cruzi* or other bloodborne pathogens carries a high risk of transmission of infection to the recipient. Every such infection can, in turn, contribute to a widening pool of infection in the general population.

8. In the 1980s and early 1990s, unsafe blood transfusion was estimated to be responsible for up to 10% of HIV infections, and underlined the need to test donated blood for HIV and other markers of infection. An estimated 2.5 million units of donated blood were discarded after they tested positive for infectious disease markers during a 12-month period in 2000-2001; the total cost of collecting and processing these subsequently discarded units is estimated to be more than US\$ 214 million.

9. Testing is essential but, alone, not sufficient to prevent the transmission of infectious agents through transfusion (because of the window period of infection and the possibility of laboratory errors). Yet more than 70 countries reported to the Global Database on Blood Safety that, during a

¹ WHO Global Database on Blood Safety. Report: 2000–2001. Geneva, World Health Organization, 2004 (in press).

² *Maternal mortality in 2000: estimates developed by WHO, UNICEF and UNFPA*. Geneva, World Health Organization, 2004.

³ *Injury: a leading cause of the global burden of disease, 2000*. Geneva, World Health Organization, 2002.

12-month period in 2000-2001, they did not test all donated blood for all the major infectious agents transmissible by transfusion: HIV, hepatitis B and C viruses, and *T. palladium*. Globally, more than six million tests for these four pathogens were not performed (or, in some 800 000 cases, the results were not provided). The actual number of untested units is thought to be underestimated, as 66 countries do not have nationally coordinated blood transfusion services or are unable to provide complete national data. Thirty-nine countries reported that in 2000-2001, because of interruptions to supplies of test kits, blood was released for clinical use without testing for transfusion-transmissible infections.

10. Evidence from around the world demonstrates that voluntary, nonremunerated donors who regularly give blood present the lowest risk of being infected with transfusion-transmissible pathogens because they are motivated solely by altruism and have no reason to conceal why their blood may be unsafe. However, many countries remain dependent on family or family replacement donation (blood donation by the families or communities of patients who require blood), which may constitute a hidden system of paid donation. In some countries, blood donors still receive payment.

11. Reports to the Global Database on Blood Safety consistently demonstrate a lower prevalence of HIV and other bloodborne pathogens among voluntary, nonremunerated blood donors than paid or family or family replacement donors, among whom the seroprevalence rates of infection are similar to the rates found in the general population. South Africa, for instance, has an HIV prevalence of 20.1% in the adult population, but only 0.02% among its regular blood donors, all of whom are voluntary and nonremunerated.

12. Only 25% of all voluntary, nonremunerated blood donations are collected in developing countries, and too many countries still rely on family or family replacement or paid donors. Low- and middle-income countries that provide complete data report that more than 43% of units of blood from new donors are still obtained from paid or family or family replacement donors, compared with less than 6% in high-income countries. In 2000–2001, 100% voluntary blood donation had been achieved in only 39 Member States, seven of which were countries targeted by the “3 by 5” initiative.

WORLD BLOOD DONOR DAY

13. More than 70 Member States marked World Blood Donor Day, 14 June 2004, in order to thank the millions of voluntary blood donors throughout the world who give blood altruistically. WHO cosponsored the event, which built directly on the success of World Health Day 2000, whose theme had been blood safety and which had been organized in collaboration with the International Federation of Red Cross and Red Crescent Societies. The 2004 Day was also organized by that Federation, together with the International Federation of Blood Donor Organizations and the International Society of Blood Transfusion, and was not intended to replace events such as national blood donor days, but to draw attention to global, national and local activities on a day that has particular significance: the birthday of Karl Landsteiner, who won the Nobel prize in 1930 for his discovery of human blood groups. World Blood Donor Day highlighted the need for a substantial increase in the number of voluntary, nonremunerated blood donors in every Member State to ensure that safe blood and blood products are always available for every patient requiring transfusion therapy.

14. Following the very positive responses across the world to World Blood Donor Day in 2004 for promoting voluntary, nonremunerated blood donation, it has been decided to repeat the event on 14 June 2005 and to seek to have it designated by WHO as an annual event.

ACTION BY THE EXECUTIVE BOARD

15. The Executive Board is invited to consider the following draft resolution:

The Executive Board,

Having considered the report on blood safety,¹

RECOMMENDS to the Fifty-eighth World Health Assembly the adoption of the following resolution:

The Fifty-eighth World Health Assembly,

Recalling resolution WHA28.72 which urged the development of national blood services based on the voluntary, nonremunerated donation of blood;

Having considered the report on blood safety;

Alarmed by the chronic shortage of safe blood and blood products, particularly in low- and medium-income countries;

Mindful that preventing the transmission of HIV and other bloodborne pathogens through unsafe blood transfusion requires the collection of blood only from donors at the lowest risk of carrying such infectious agents;

Recognizing that voluntary, nonremunerated blood donation is the cornerstone of a safe and adequate national blood supply that meets the transfusion requirements of all patients;

Noting the positive responses to World Blood Donor Day, 14 June 2004, for the promotion of voluntary, nonremunerated blood donation,

1. AGREES to the establishment of an annual World Blood Donor Day, to be celebrated on 14 June each year;

2. URGES Member States:

(1) to promote and support the annual celebration of World Blood Donor Day;

(2) to establish or strengthen systems for the recruitment and retention of voluntary, nonremunerated blood donors and the implementation of stringent criteria for donor selection;

(3) to introduce legislation, where none exists, to eliminate paid and family or family replacement blood donation;

¹ Document EB115/9.

(4) to promote multisectoral collaboration between government ministries, blood transfusion services, professional bodies, nongovernmental organizations, civil society and the media in the promotion of voluntary, nonremunerated blood donation;

3. CALLS UPON international organizations and bodies concerned with global blood safety to collaborate in promoting and supporting World Blood Donor Day;

4. INVITES donor agencies to provide adequate funding for initiatives to promote voluntary, nonremunerated blood donation;

5. REQUESTS the Director-General to work with other organizations of the United Nations system, multilateral and bilateral agencies, and nongovernmental organizations to promote World Blood Donor Day.

= = =