



WORLD HEALTH ORGANIZATION

FIFTY-EIGHTH WORLD HEALTH ASSEMBLY
Provisional agenda item 20

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Proposal for establishment of 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 thirty-seventh session 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 strengthen 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 use of blood – to minimize unnecessary transfusions and their associated risks – and safe clinical transfusion procedures; 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: scaling up treatment and accelerating prevention*. Geneva, World Health Organization, 2004.

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 and childbirth, 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. In the 5- to 29-year age group, road traffic injuries rank second as cause of death and are a leading cause of morbidity for both sexes;³ intensive use of transfusions is frequently needed in the management of trauma. Blood transfusion also plays a key role in the management of conditions such as haematological disorders (including leukaemia, haemophilia, thalassaemia), cancer chemotherapy, open heart surgery, and bone marrow and organ transplantation.

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. National programmes to promote voluntary blood donation are essential, with sustained, long-term public education campaigns.

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, *Trypanosoma 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. This issue underlined the need for blood safety interventions, including the testing of 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

¹ WHO Global Database on Blood Safety. Report: 2000-2001. Geneva, World Health Organization, 2004 (document WHO/EHT/04.09).

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.

discarded units is estimated to be more than US\$ 214 million. Data from the Global Database on Blood Safety show a direct correlation between high proportions of voluntary, nonremunerated blood donors and low rates of discard of units of donated blood due to positive test results. This indicates that an investment in voluntary blood donor programmes results in improved quality and safety of blood as well as reduced costs.

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 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. pallidum*. 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 patients who receive blood from voluntary donors who give blood regularly are at the lowest risk of acquiring blood-borne pathogens through transfusion because these blood donors are motivated solely by altruism and have no reason to conceal why their blood may be unsafe. Reports to the WHO Global Database on Blood Safety consistently demonstrate a lower prevalence of HIV and other transfusion-transmissible infections among voluntary nonremunerated blood donors than paid and family or family replacement donors (members of the patient's family or friends). 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. In contrast, the seroprevalence of infection among paid and family or family replacement donors is as high as the rates found in the general population. This has particular significance for countries with high burdens of infections that can be transmitted through transfusion.

11. Only 25% of all voluntary, nonremunerated blood donations are collected in developing countries. Thirty-seven countries still use paid donors, for whom monetary benefit rather than helping others is the primary motivation. One hundred and twenty three other countries remain dependent on family or family replacement donation, which may constitute a hidden system of paid donation. 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.

12. Resolution WHA28.72 identified voluntary, nonremunerated blood donation as the cornerstone of a safe blood supply. More than twenty-five years later, only 39 Member States had been able to achieve 100% voluntary nonremunerated blood donation (2000-2001 data), 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. It was not intended to replace events such as national blood donor days, but rather 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 the Health Assembly as an annual event.

15. In January 2005, the Executive Board at its 115th session examined the Secretariat's report on blood safety and adopted resolution EB115.R15. Discussions ranged widely and the Board urged that World Blood Donor Day should be observed in the context of broader efforts to ensure the safety and availability of blood transfusion.¹

ACTION BY THE HEALTH ASSEMBLY

16. The Health Assembly is invited to consider the draft resolution contained in resolution EB115.R15.

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¹ See document EB115/2005/REC/2, summary record of the fifth meeting.