Organized by WHO HQ/Geneva and Sharjah Blood Transfusion and Research Centre and co-sponsored by the Government of the United Arab Emirates

Concept Paper

Background

Blood transfusion is a life-saving intervention that has an essential role in patient management within health systems. Member States of the World Health Organization (WHO) endorsed several World Health Assembly (WHA) resolutions on blood transfusion safety including WHA28.72 in 1975 and WHA58.13 in 2005. These resolutions urged Member States for the provision of adequate supplies of safe blood and blood products that are accessible to all patients who require transfusion, the rational use of blood and safe clinical transfusion practice. Today, many countries are facing challenges in maintaining a sufficient supply of safe blood and blood products and ensuring their safe and appropriate use. Increasingly, economic pressures and public perceptions have been driving decision-making in the provision and clinical use of blood products.

There is a growing interest in many countries in the development of systems to promote appropriate blood transfusion and to improve the quality, safety and efficiency of treatment with blood products in patient management. This is further supported by a number of randomized controlled trials and observational studies which demonstrated that red cell transfusion may be associated with the worsening of clinical patient outcomes. Recent studies in many clinical settings have shown that the potential short and long-term hazards of transfusion have been underestimated and other randomized studies have failed to show the benefits of red cell transfusion. The issue of patient blood management generated much interest and discussion among WHO Member States during the 126th Session of the WHO Executive Board (resolution EB126.R14). Subsequently, in May 2010, the 63rd World Health Assembly adopted resolution WHA63.12 on "Availability, safety and quality of blood products", requesting the Director-General of WHO "to provide guidance, training and support to Member States on safe and rational use of blood products … and patient blood management".

Patient blood management (PBM) is a patient-focused, evidence-based and systematic approach to optimize the management of patient and transfusion of blood products for quality and effective patient care. It is designed to improve patient outcomes through the safe and rational use of blood and blood products and by minimizing unnecessary exposure to blood products. Essential elements of patient blood management include: the prevention of conditions that might otherwise result in the need for transfusion (through health promotion and screening for early detection), appropriate diagnosis and optimal treatment, including the use of alternatives to transfusion, good surgical and anaesthetic techniques, the use of alternatives to blood transfusion and blood conservation.

Strategies for optimal management of patient and transfusion of blood products include: evidence-based transfusion guidelines based on high quality clinical trials both on the benefits of blood transfusion; and reduction of the need for transfusion. Different clinical disciplines should work in multidisciplinary hospital teams for effective patient blood management and hospital transfusion committees should be established to study, implement and monitor local blood management strategies.

Patient blood management also depends on the availability of adequate supplies of safe, high quality blood products, skilled medical and nursing care, technical expertise and sufficient supplies of medical devices, equipment, reagents and pharmaceuticals that can reduce the need for transfusion. A systematic approach to blood management enables the efficient use of all resources in order to promote quality and effective patient care.
**WHO Global Forum for Blood Safety**

The WHO/HQ Blood Transfusion Safety Team (WHO/BTS) has established a global forum as a mechanism to foster collaboration, enhance communication and information exchange among key international experts, institutions, organizations and other stakeholders. The forum will meet once in two years to deliberate on a specific topic relevant to the global blood safety concerns, in order to make structured observations and identify priorities for action at national and international levels.

WHO/BTS is convening a two-day meeting of this forum in March 2011, to highlight the importance of effective blood management for patient health and safety in health-care systems, consider barriers to its implementation and identify factors causing variability in transfusion practices in different countries. Lessons learnt and strategies to address the major challenges faced by both developed and developing countries in managing blood use for quality patient care will also be discussed. This forum is, jointly organized by the Sharjah Blood Transfusion and Research Centre and co-sponsored by the Government of the United Arab Emirates, to be held on 14–15 March 2011 in Dubai, United Arab Emirates.

Around 80–100 participants are expected to attend the forum, including representatives from 42 developed and developing countries, members of the WHO Expert Advisory Panel on Transfusion Medicine, WHO Collaborating Centres, international organizations and WHO professional staff from headquarters and WHO regional offices. Country representatives will comprise national blood programme managers, international clinical and transfusion medicine experts, public health experts, academics and hospital administrators.

Representatives have also been invited from other UN organizations (UNFPA, UNAIDS, UNDP and UNICEF) and key international nongovernmental and professional organizations associated with the clinical use of blood. These include AABB, EDQM-Council of Europe (CoE), European Commission (EC), International Confederation of Midwives (ICM), International Council of Nurses (ICN), International Federation of Gynecology and Obstetrics (FIGO), International Society of Blood Transfusion (ISBT), International Society of Hematology (ISH), International Society of Surgery (ISS), Medical Society for Patient Blood Management (MSBM), Network for Advancement of Transfusion Alternatives (NATA), Society for the Advancement for Blood Management (SABM), Society for Critical Care Medicine (SCCM), Thalassaemia International Federation (TIF), World Federation of Associations of Paediatric Surgeons, World Federation of Hemophilia (WFH), World Federation of Societies of Anaesthesiologists (WFSA) and the World Orthopaedic Organisation (SICOT).

**Objectives of the Forum: Patient Blood Management**

1. To explore and define the concept of PBM and highlight its importance in health-care systems for patient health and safety;
2. To assess and review the current challenges, barriers and lessons learned from countries' experiences in implementing PBM systems;
3. To define key strategies and approaches for the effective implementation of PBM systems;
4. To identify mechanisms for evaluating the impact of PBM and for quality improvement;
5. To provide an international, interdisciplinary forum among transfusion medicine specialists, clinicians, public health specialists, hospital administrators, scientists, technologists, nurses and midwives to bring synergy to PBM systems;
6. To develop structured observations and identify priorities for action at national and international levels, as well as strategies for effective implementation of PBM systems.