

Status of Blood Transfusion Services in South-East Asia Region

Blood safety has been a priority area of work for World Health Organization (WHO). The theme of World Health Day in 2000 was "Blood saves Life. Safe blood starts with me". Evolving and expanding HIV epidemics have further accentuated importance of safe blood. Recognizing the importance of availability and safety of blood, WHO has developed a Strategy for Safe Blood. The key elements of this strategy address the issues of nationally coordinated blood transfusion services, collection of blood only from voluntary blood donors, quality testing of blood to ensure its freedom from infectious markers and rational use of blood in clinical settings.

Based on 2007 data, the 3456 blood banks in the South-East Asia Region collected 9.4 million units of blood annually, of a total estimated requirement of 16 million units. Around 66% of the total blood is collected from voluntary non-remunerated blood donors. Two-thirds of the population of South-East Asia resides in India where more than 6 million units of blood are collected, 59 percent of this collection is from voluntary blood donors. Bangladesh is the only country in this Region that still permits professional blood donors. 37% of blood is converted into components and remaining 63% is transfused as whole blood. Demand of components from prescribers is limited. Lack of knowledge amongst clinicians and nonavailability of sufficient quantity of components have become part of a vicious circle. Though some orientation programmes have been conducted to upgrade the knowledge of clinicians, given the large number of clinicians, several such courses are needed to generate demand for use of blood components.

With the improvement in blood safety interventions in the Region, there has been a steady decrease in HIV in screened blood units. Six countries in the Region have a national blood policy and eight countries have nationally coordinated blood transfusion services. In Myanmar, almost all blood banks are part of hospital-based clinical laboratories. Red Cross societies manage major part of national blood transfusion services in Indonesia, Nepal and Thailand. Blood transfusion services lack adequate resources to update their technology. Moreover, they need to increase their reach to enhance their donor base.

Screening for HIV and hepatitis B virus (HBV) is almost universal in South-East Asia; hepatitis C virus (HCV) screening has also been initiated in several countries. Screening for infectious markers is of utmost importance in this Region because of the large number of carriers of hepatitis B and hepatitis C. Regional prevalence of HIV in blood donors is around 0.225%.

Quality is being perceived increasingly as an integral component of blood transfusion services. More than 170 blood bank professionals were trained as quality managers during 2001–2007 under the Quality Management Project of WHO. The National Blood Centre in Thailand has been designated as a WHO Collaborating Centre for blood transfusion services. It also serves as a regional quality centre and provides continuous technical support to all countries in all matters pertaining to blood quality.

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Country	Number of blood banks	Number of blood units collected per year (units)	% Voluntary donors	% used as whole blood	% screened for HIV	Prevalence of HIV in donors (%)
Bangladesh	114	324505	29	97	100	0.00832
Bhutan	29	5993	39	63	100	0.03986
DPR Korea	12	97810	96	38	100	0
India	2382	6080000	59	75	100	0.28452
Indonesia	211	1750000	81	38	97	0.05361
Maldives	19	6764	14	88	100	0.20000
Myanmar*	515	138616	55	95	100	0.51400
Nepal	61	121512	90	75	100	0.09382
Sri Lanka	74	246752	75	2	100	0.17000
Thailand	12	499212	100	4	100	0.26482
Timor-Leste	5	2898	37	68	100	0.48309

*data pertains to 2006 and does not represent all blood banks

**based upon national reports to Global database on Blood safety

In spite of considerable awareness, blood transfusion services suffer from inadequate political commitment, priority, fragmentation and lack of resources. Myths and lack of information amongst communities prevent a large number of people to donate blood. Human resource managing blood transfusion services are inadequate in number and lack training on recent concepts of blood safety.

The importance of blood transfusion services in improving quality of care of patients as well as reducing the load of HIV, hepatitis B and hepatitis C is being increasingly recognized. Time has come when serious concerted and coordinated efforts with international support are essential to strengthen blood transfusion services in developing countries of South-East Asia Region.