Developing blood services in the Philippines

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The goal of achieving reforms in the Philippine healthcare system has moved our government to push regulations in all key areas. With the objective of ensuring access to safe, quality and affordable blood products, improved facilities and services, the transfusion system in the Philippines is now in focus. Hence, the issuance of several administrative memos to guarantee the achievement of an effective blood service network in the country.

Key words: affordable, blood, blood service network, quality, safe.

Introduction

The idea of Blood Services Centralization or Regionalization began to be implemented over 30 years ago in United Kingdom, France, United States, Australia, Japan and other countries. It was the World Health Organization who conceptualized the blood center Model and recommended the system to developing countries like the Philippines. Since 1992, this model was recommended for the Philippines by series of consultants from Israel, United Kingdom, Australia and the World Health Organization. In 1992, WHO recommended three blood centers for the entire country and in 2003, the latest WHO consultant who visited recommended that there should be eight regional blood centers in the Philippines.

Legislations of the government

In 18 August 1987, the Department of Health (DOH) released the Department Circular No. 99 s. of 1987. It aimed to provide an adequate supply of safe blood for transfusion from voluntary non-remunerated blood donation. It also aimed to encourage the efficient utilization of blood resources among blood service facilities (BSFs). In December 1988, Department Order # 339-K s. of 1988 discussed the creation of Committee on National Blood Service Program which mainly comprised the DOH, Philippine Red Cross (PRC), and the Philippine Blood Coordinating Council (PBCC). Later, in 1992 the DOH Administrative Order 118-A s. of 1992 promulgated the National Blood Services Program. The so-called Republic Act 7719 also known as the National Blood Services Act of 1994, aimed to promote and encourage voluntary blood donation by the citizenry and to lay down the principle that the provision of blood for transfusion is a professional medical service and not a sale of a commodity. It also emphasized the provision for an adequate, safe, affordable and equitable distribution of blood and blood products, and lastly, mandated the DOH to establish and organize a National Blood Transfusion Service Network in order to rationalize and improve the provision of adequate and safe supply of blood.

WHO consultant recommended the adoption of the WHO Strategies for the Blood Transfusion Services (BTS) in 2003. This included the National Legislation, Blood Policy and plan for the BTS, establish a nationally coordinated BTS for the provision of safe blood and the components through centralization of testing and processing of blood, define roles and responsibilities and coordination between National Health Authorities, BTS and other stakeholders, full commitment and resources from the government, and national standards for the operation of the BTS.

The national legislation of RA 7719 included the program and regulation guidelines through Implementing Rules and Regulation (IRR) A.O. 9 series 1995 and the revised IRR A.O. 2005-002, which created the National Blood Council and realignment of functions of BSFs such as the blood center, Blood Bank, Blood Collecting Unit (BCU) and Blood Station (BS).

The national plan is to have safe blood for all (Vision), and a nationally coordinated and efficient networking of BSFs based on voluntary blood donation that will ensure safe, adequate, timely and accessible blood supply and the
rational use of blood in the Philippines through advocacy, professional education and research (Mission).

The DOH Administrative Order 2008-0008 is known as the Revised Rules and Regulations Governing the Regulation of Blood Service Facilities. It stated that tests for blood samples shall be done at DOH and/or PRC blood center as designated by the NCBS (National Council of Blood Services) and the no re-testing policy of blood issued by DOH and PRC. However, there was still a transitory provision that all licensed DOH and PRC blood center performing tests shall be allowed to operate as such until 2009. By 2010, there shall be nationally coordinated blood service network with only the designated BCs performing the centralized testing and processing of blood.

Table 1 represents a summary of the blood service categories as mentioned in AO # 2005-0002. The previously known category as blood bank A and blood bank B are now integrated to blood center (BC). Each category is further structured into a more specified task and responsibility. A blood center is a non-hospital based facility where the PRC BSFs are included. BCs are responsible for activities in relation to blood donations. This includes advocacy, motivation, recruitment and retention, collection, testing, counselling and the provision of blood and blood products to other transfusion facilities. On the other hand, the blood banks activities pertain to aspects catering to patients. Thus, these are the facilities that are hospital based. They will focus more on the clinical aspect of blood transfusion and haemovigilance. They are also required to establish a hospital based transfusion committee to take part in the observance of haemovigilance. A BCU is a non-hospital based facility that does BC activities except blood testing and processing. Lastly, a BS does advocacy, storage and release of blood units to end user facilities.

DOH and PRC cooperation: ‘a centralized blood service’

For the BSFs of Red Cross, such modification in the blood program is not a new thing, since the PRC was already operating as blood centers, BCU and BS depending on the capability of each BSF. The immense challenge lies in its capability to serve the major blood demands of the country. Table 2 shows that out of 35 BCs, 22 are from PRC and 6 from the DOH while 3 in the local government unit. This entails much of the resources and funding including the upscaling of manpower and upgrading of facilities and equipment to comply with the minimum requirements. Also, in the mapping of the BSFs as shown below, there is a saturation of the Red Cross BSFs strategically located all over the country. While the Red Cross is preparing so much

<table>
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<th>Philippine Red Cross (PRC)</th>
<th>Department of Health (DOH)</th>
<th>Local Government Unit (LGU)</th>
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<td>Designated blood centers</td>
<td>22</td>
<td>6</td>
<td>3</td>
<td>31 *</td>
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<tr>
<td>BCU/BS and Satellite Composite</td>
<td>8</td>
<td>–</td>
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<tr>
<td>BCU/BS</td>
<td>46</td>
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<td>1</td>
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<tr>
<td>BCU</td>
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<td>17</td>
<td>17</td>
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<tr>
<td>BS</td>
<td>–</td>
<td>7</td>
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<td>76</td>
<td>13</td>
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<td>110</td>
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<td>% Share</td>
<td>69</td>
<td>12</td>
<td>19</td>
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* Plus four additional regional blood centers (under evaluation).

Table 1 Blood service facility categories (DOH Administrative Order # 2005-0002 or revised IRR of RA 7719)
for this transition utilizing its own resources, a counterpart financial assistance from the government will be provided for all designated blood centers to cope with the demand of a Centralized Blood Service. While in the transition period, flexibilities are given to a limited number of private and government hospitals in some regions to continue its blood collection, testing and processing as part of the strategy prior to the full implementation of the administrative order.

**The Philippine Red Cross**

The Philippine Red Cross renders comprehensive blood services in accordance with the provisions of National Blood Services Act 1994 or Republic Act 7719 (the Act). Tripartite agreement between DOH, Philippine Blood Coordinating Council and PRC governs the modus operandi of the blood services. Mandated by the Act, PRC is responsible for public education. Of the 76 PRC blood facilities with blood services, 22 have comprehensive blood services (advocacy, donor recruitment and retention, blood collection, testing, processing, storage, and supply to the hospitals), and the rest are primarily involved in the recruitment of non-remunerated voluntary blood donors (VNRBD), blood collection and distribution.

The goal of the PRC is to build the capability to provide up to 100% of the national blood requirement through the Red Cross 143 (RC 143) program. The RC 143 is a chapter-based program wherein every chapter recruits 43 volunteers in each barangay (smallest unit of government). The volunteers will be tasked to assist the organization during disaster and emergencies, support us in community, health and welfare activities and act as standby or reserved donors who will donate blood in emergency situations. The country has 43,000 barangays and from the program, 1,800,000 volunteer donors will be recruited.

The strategic objectives for the operation of PRC Blood Services are as follows:

1. Safe and quality blood for all – each facility shall ensure to comply with quality standards. Our mantra that every client should not be turned away because of lack of blood is directed to each blood facility.

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**Fig. 1** WHO, DOH, PRC & PBCC Press Conference.

**Fig. 2** Mapping of blood centers under PNBS (DOH AO 2008-008)
(2) 100% compliance with DOH standards and regulations – the organization shall comply at all times the government’s regulation pertaining to minimum manpower and equipment requirement for blood service operations.

(3) Improve financial self-sustainability – each blood unit corresponds to a blood processing fee. The fee collected conforms to the fee mandated by the government. For indigent clients, the Red Cross has a Blood Samaritan Program. The mechanism of the program is the solicitation of monetary assistance from individuals, groups, and private and government units. The donation is earmarked to subsidize processing fee of blood of indigent patients.

(4) Attain ISO 15189 rating in 2014 for all regional blood centers and other BSFs to follow – the Red Cross have 22 regional blood centers that will aim to earn ISO 15189. In 2010, the National blood center obtained ISO 9001:2008 [Quality Management System]. They are also tasked to work out for ISO 15189. Quality embodies notions of efficiency, effectiveness, competency and customer satisfaction.

(5) 100% voluntary blood donation – currently the national average of voluntary blood donation of PRC is 79%. In parallel to the global strategic objective, the PRC shall improve voluntary blood donation to 100% by 2014.

At the highest level, the PRC has mutual trust, respect and confidence towards the DOH. Although an auxiliary to the authorities of the government, the Blood Services of the PRC stands in parallel with the activities of the government. Forward-looking, the PRC is challenged with the respect and confidence the government has given with designation of 22 blood centers.


WHO has identified blood safety as one of its seven priority areas. Quality management of BTS has been identified by WHO as one of the significant components to achieve safety, adequacy and quality blood supply. A well-organized BTS, with quality systems in all areas, is a pre-requisite for the safe and effective use of blood and blood products. This is a vital component of any health care delivery system. An integrated strategy for Blood Safety is required for elimination of transfusion transmitted infections (TTI) and for provision of safe and adequate blood supply to the people.

A well-defined quality standard for BSFs was a long-felt demand for improving the BTS of the PRC. ISO 9001 is a quality management standard. It can help both product and service oriented organizations achieve standards of quality that are recognized and respected throughout the world.

In its efforts to achieve blood safety through quality management systems, the PRC National blood center earned ISO 9001:2008 in December 2010. Contracting a consultancy firm to help assist the organization be ISO certified started in mid-2009. ISO 9001 has 136 quality requirements that are required to be complied. The initiative started in March 2009 with an orientation to all members about ISO and its activities. It is composed of a 52-member team from the National blood center and its support services like the Administration, Finance, Logistics, Human Resource and Information Technology departments. Of the 52 members, 7 are dedicated quality members from the National blood center. The team is headed by no less than the Secretary General Gwendolyn Pang of the PRC. Other key personalities are the following: Dr Christie Monina Nalupta as the Quality Management Representative, Dr Urduja Carino as the Deputy Quality Management Representative and Mr Renato Hapan as the Document Control Custodian. The National blood center produced three ISO manuals as part of the requirements namely, Quality Manual, Process Manual and Job Description Manual. This will be replicated to the rest of Red Cross blood facilities as commitment to quality service.

The Philippine Blood Coordinating Council

The PBCC is a non-governmental organization dedicated to the advocacy of voluntary blood donation and education of healthcare professionals in the rational use of blood, quality blood banking and blood transfusion practices in the Philippines.

The progress of blood services in the Philippines

The country has three major archipelagos with a total population of 90 million in 2009. The national blood requirement for each year is estimated at 1% of the total population. It is believed that the demand for blood for 2009 was 900,000 units. From year 2007 to 2009, blood donations increased from 500,000 to 550,000 units. The PRC shared 43% to the total blood collection of the country making it one of the major contributor of the country’s blood supply. Towards the end of 2007, the country ran its blood service operations with a paid donation-free system closing down eight major commercial blood banks in Manila, the capital of the Philippines. Majority of blood donations were voluntary non-renumerated at 60% at a plateau in 2007–2009; however, noticeable also were replacement donations from private hospitals. To note in 2009, the PRC
shared in the ratings of voluntary blood donations at 79% banking on mobile blood donations in communities, colleges and universities, private and government offices.

The country started the implementation of a centralized blood service in 2009. Blood facilities have been rationalized although major hospitals with good track records were allowed flexibilities (continue recruitment, blood collection, testing, processing and usage of blood for respective hospital clients.) It is estimated that the transition period will take 5 year prior to full implementation of centralization.

As we journey the path to a centralized blood service for the Philippines, we come across difficulties, which may seem impossible to conquer. The tripartite organization as before will continue its mandate of providing safe and adequate supply of blood to the country. The DOH, PRC and PBCC are committed to work as one in the realization of this humanitarian program.

Disclosures
C. M. M. Nalupta attended the 6th Japanese Red Cross/Red Crescent (JRCS) Blood Services Symposium held in Tokyo, Japan, where some of the topics were reported.