SITUATION OF BLOOD DONOR MOTIVATION IN VIETNAM AND POTENTIAL IN PLASMA DONOR RECRUITMENT

IPFA 4th Asia Workshop on Plasma Quality and Supply

Ngo Manh QUAN, MD., PhD.
National Blood Center,
National Institute of Hematology and Blood Transfusion (NIHBT), Viet Nam

Hanoi, 14 March 2019
Our story in memory, early 1990s

- Lack of blood
- Paid donor
- Glass bottle
- Poor quality
- Negative behavior

⇒ POOR BLOOD SERVICE
Blood service in Vietnam – 1990s

- A lot of blood establishments: National, Provincial, District level
- Almost were hospital-based blood banks
- Old facilities and equipment, unqualified staff, poor quality management e.g.
- Whole blood use

⇒ HOW DID WE IMPROVE OUR SERVICE?
Restructuring and centralization of BTS

Donor Recruitment

Blood Collection

Processing

Screening

Distribution

Clinical use

Education

Communication

Campaign

Donor service

Quality improvement: technical, equipment, training...

Training Service
Centralizing blood service

- 1 National Blood Center (NIHBT – in Hanoi)
- 4 Regional Blood Centers
- 10 provincial Blood Centers
- 60 hospital blood banks (hematology and blood transfusion dept.)
- 1 Red Cross Blood Donation Center
## Competence of blood establishments (2016)

<table>
<thead>
<tr>
<th>No</th>
<th>Blood collection by establishments (units/day)</th>
<th>No of blood establishments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt; 1</td>
<td>28</td>
</tr>
<tr>
<td>2</td>
<td>1 to &lt; 10</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
<td>10 to &lt; 45</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>45 to &lt; 85</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>85 to &lt; 160</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>160 to &lt; 550 (60,000 – 200,000 units/year)</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>≥ 500 (&gt; 200,000 units/year)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total**
- 4 regional BCs collected >50,000 blood units per year - 693,360 units (63% nationwide);
- 72 blood establishments collected < 45 blood units per day;
- 26 blood establishments collected platelets apheresis.

**In 2016**
Partnership in voluntary blood donor promotion

Central Government

National Steering Committee on VNRBD

Provincial Steering Committee

District Steering Committee

Commune Steering Committee

Local Government

Red Cross Society

Organization, university, etc

Organization, institutions, etc
Main activities in donor promotion

- National blood donation day, issued by MOH, Jan 6th, 1995
- National blood donation day, decision by Prime Minister, April 7th, 2000
- National meeting on VNRD, annually
- Establishment of National Steering Committee on VNRBD (2008)
In 2018, Vietnam collected 1,336,842 blood units; 97.9% from VNRBD; 1.45 blood donations / 1.000 inhabitants.
Type of whole blood donations  
(whole country, 2016 - 2017)

<table>
<thead>
<tr>
<th>No</th>
<th>Type of blood donations</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Donations</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>VNRBD</td>
<td>1,098,462</td>
<td>97.48</td>
</tr>
<tr>
<td>2</td>
<td>Paid donation</td>
<td>10,068</td>
<td>0.9</td>
</tr>
<tr>
<td>3</td>
<td>Replacement</td>
<td>17,963</td>
<td>1.5</td>
</tr>
<tr>
<td>4</td>
<td>Autologous donation</td>
<td>262</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,126,755</td>
<td>100</td>
</tr>
</tbody>
</table>

Platelets Apheresis

- Pooled platelets are still used
In 2018, NIHBT collected 323,615 blood units, 98.1% from VNRBD.
Some activities to increase and sustain voluntary non-remunerated blood donors

1. Donor Service and Care
   - Refreshments during and after donation
   - Gift / health service
   - Certificate
   - Transportation allowance for donors

=> $2 / donation
Some activities to increase and sustain voluntary non-remunerated blood donors

1. Donor Service and Care
   - SMS after donation
   - SMS, email, e-card on birthday and/or special occasions
Some activities to increase and sustain voluntary non-remunerated blood donors

1. Donor Service and Care

2. Communication
   - Media and Press relations
   - Press release
   - Meeting
   - Training
Some activities to increase and sustain voluntary non-remunerated blood donors

1. Donor Service and Care
2. Communication
3. Social Media
   - Facebook
   - Youtube

Vietnam 2015 (March): 31.3 million are Facebook users
Some activities to increase and sustain voluntary non-remunerated blood donors
Some activities to increase and sustain voluntary non-remunerated blood donors

1. Donor Service and Care
2. Communication
3. Social Media
4. Blood collection
   - Blood center
   - Mobile (bus, site)
   - Fixed sites

=> 90% by mobile collection
Some activities to increase and sustain voluntary non-remunerated blood donors

1. Donor Service and Care
2. Communication
3. Social Media
4. Blood donation method
5. Donor Club/Volunteer Club
   - Donor club
   - Young recruiter club
   - Club 25
   - Volunteer club
Walking blood banks for remote and island areas

- 70% of area is mountains
- Coastline of 3.444 km
- > 3,000 islands
- 287 districts in remote areas (in 48 provinces)

The blood demand exceeds the local supply.
The procedure to establish and activate walk-in donor

1. Make a list of walk-in donors
   (Club of walk-in donors)

2. Annual screening
   (HBV, HCV, HIV)

   - Activate in emergency
   - Rehearse the procedure

3. Update and recruit new members

   - Test at Blood center

   (ABO, HIV, HBV, HCV)

   O (+/-)
   HIV, HCV, HBV (-)

   Screen out

   Communication
   Registration

   Screen out

   Unsuitable
Platelets apheresis donor motivation

- Voluntary
- Communication
- Converting from whole blood donor
- Paid donor vs non-remunerated
Blood components collection

- Platelets apheresis
- Red blood cell
- Plasma

Platelets Apheresis

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>41,375</td>
</tr>
<tr>
<td>2014</td>
<td>53,214</td>
</tr>
<tr>
<td>2015</td>
<td>54,868</td>
</tr>
<tr>
<td>2016</td>
<td>67,046</td>
</tr>
</tbody>
</table>
Limitation of donor recruitment and blood collection

- Most of blood donors are young people;
- Rate of repeated donors is quite low (42%);
- Blood donation volume 250 ml/donation (55%);
- Depending on mobile collection

![Type of blood bag](image)
During 25 years:

- Meeting 70% of total demand for blood and blood components
- Improvement of donor panel, both whole blood donor and platelets donor
- Improving service
POTENTIAL IN PLASMA DONOR RECRUITMENT
Research Article

How to Motivate Whole Blood Donors to Become Plasma Donors

Gaston Godin\textsuperscript{1} and Marc Germain\textsuperscript{2}

\textsuperscript{1} Research Group on Behavior and Health, Laval University, FSI-Vandry, Room 3493, Quebec City, QC, Canada G1V 0A6
\textsuperscript{2} Medical Affairs, H\'ema-Qu\'ebec, 1070, avenue des Sciences-de-la-Vie, Qu\'ebec City, QC, Canada G1V 5C3

Correspondence should be addressed to Gaston Godin; gaston.godin@fsi.ulaval.ca

Received 21 May 2014; Accepted 13 October 2014; Published 28 October 2014

Academic Editor: Erwin Strasser

Copyright © 2014 G. Godin and M. Germain. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

This study tested the efficacy of interventions to recruit new plasma donors among whole blood donors. A sample of 924 donors was randomized to one of three conditions: control; information only by nurse; and information plus self-positive image message by nurse (SPI). Participants in the control condition only received a leaflet describing the plasma donation procedure. In the two experimental conditions the leaflet was explained face-to-face by a nurse. The dependent variables were the proportion of new plasma donors and the number of donations at six months. Overall, 141 (15.3\%) new plasma donors were recruited at six months. There were higher proportions of new plasma donors in the two experimental conditions compared to the control condition ($P < .001$); the two experimental conditions did not differ. Also, compared to the control condition, those in the experimental conditions (all $Ps < .001$) gave plasma more often (information only by nurse: $d = .26$; SPI: $d = .32$); the SPI intervention significantly outperformed ($P < .05$) the information only by nurse condition. The results suggest that references to feelings of SPI such as feeling good and being proud and that giving plasma is a rewarding personal experience favor a higher frequency of plasma donation.
POTENTIAL IN PLASMA DONOR RECRUITMENT

- Donor source and potential in motivating whole blood donor becoming plasma donor
- Culture and tradition
- Experiences in blood donor recruitment
- Preparing for donor service
- Good service at blood centers

⇒ Motivate whole blood donor becoming plasma donor
1. Success in whole blood and platelet donor recruitment.
2. Experiences in donor motivation and recruitment.
3. Willing to lunch campaign to recruit plasma donor.
Thank you for your attention!