

***Towards 100 percent Voluntary Blood Donation – Understanding Challenges
and Barriers in the South – East Asia***

***Report of a Pilot Online Web Training Series for Nepal, Indonesia.
Bangladesh, Maldives and Timor Leste, 7-9 October 2021, Department of
Transfusion Medicine, Postgraduate Institute of Medical Education &
Research, Chandigarh, India***

WHO Regional Office for South-East Asia, New Delhi, October 2021

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1. INTRODUCTION

A pilot online web training series was conducted by the WHO Regional Office at New Delhi, India in collaboration with the Department of Transfusion Medicine, PGIMER, Chandigarh, India for the member countries of Nepal, Indonesia, Bangladesh, Maldives, and Timor Leste, from the 7 to 9 October 2021. Thirty-six experts from India, Sri Lanka, Nepal, Bangladesh, Indonesia, Thailand, Malaysia, The Republic of Korea, Norway, Australia, and the Regional Advisor Blood Safety, WHO South East Asia, facilitated the training series over the 3 days of training.

2. OBJECTIVES

The objective of the pilot online web training series was

- 2.1. To understand the challenges and barriers towards 100% voluntary blood donation in the South East Asia.
- 2.2. To develop key recommendations towards Sustainable Development Goals in the Journey Towards 100% Voluntary Blood donations in South East Asia

3. INAUGURAL SESSION

The pilot online web training series started on 7 October 2021 with the welcome address by Prof. Jagat Ram, Director, PGIMER, Chandigarh, India. He stressed upon the role of voluntary blood donation in safety of blood supplies. The WHO support towards voluntary blood donation in the South East Asia region was reflected in the Regional Director's message delivered on World Blood Donor Day 2021, that was presented by the Department of Health Development Systems, WHO Regional Office for South East Asia, New Delhi, India.

4. UNDERSTANDING THE UNIQUE CHALLENGES IN VOLUNTARY BLOOD DONATION IN SOUTH EAST ASIA

4.1. Overview of Regional Scenario in South East Asia

Dr. Aparna Singh Shah, Regional Adviser, Blood, Blood Products, Products of Human Origin, IPC and Patient Safety, Department of Health Development Systems, WHO Regional Office for South East Asia, New Delhi, highlighting the WHO's commitment towards Safe and Adequate blood components in line with the WHO's Action framework to advance universal access to safe, effective and quality-assured blood products 2020-2023. The challenges imposed by COVID-19 and the guidance document prepared by WHO to streamline the functioning of Blood Transfusion Services during the Covid pandemic.

4.2. Overview of Regional Scenario in Western Pacific

Dr So Yong-Kwon, Director, Blood Safety Bureau, Korean Red Cross Blood Services Headquarters, The Republic of Korea updated the delegates that the country has a National Blood Management System and only voluntary blood donations. The country has a smart blood donation application – Red Connect since 2011, official blood donation application. The country has incentives for voluntary blood donation, has switched to individual donation Nucleic Acid Testing (ID-NAT) since 2012. The country has a rare donor registry, HLA matched platelet donor registry, national hemovigilance program with dedicated donor vigilance arm. The current challenge faced is the aging Korean population and the impact it may have on the BTS.

4.3. Current Status of Whole Blood, Component Donations & Challenges in the Self-Sufficiency of Blood and Blood Components in South East Asia – Country scenarios

4.3.1. Sri Lanka

Dr Lakshman Edirisinghe, Director, Head, WHO Collaborating Center, National Blood Transfusion Service, Ministry of Health, Sri Lanka, emphasized that Sri Lanka has achieved 100% voluntary blood

donation (VBD) in 2014 and there is 100% conversion into components. The country has incentives for voluntary blood donation, a National Reference Laboratory, Internal & External Quality Assessment Schemes, National Hemovigilance Surveillance System, and a pilot implementation of Nucleic Acid Testing for enhancing blood safety in the country, which shall be made universal in due course.

4.3.2. Nepal

Dr Manita Rajkarnikar, Director, Nepal Red Cross Society, Nepal informed that the country has 80% VBD with 40% repeat donors and 45% component preparation. The challenges are of lack of defined financial support towards the BTS, trained manpower and commitment towards VBD and there is no projection about estimated demand of blood in the country.

4.3.3. Bangladesh

Dr Md. Ashadul Islam, General Secretary, National Safe Blood Transfusion Expert Committee, Dhaka, Bangladesh highlighted that the country is midway from its tasks towards 100% VBD, currently at less than 50% VBD with about 30% conversion into blood components and gave a holistic overview of the BTS in Bangladesh.

4.3.4. Indonesia

Dr Tegu Triyono, Chairman, National Committee for Blood Services, Indonesia, informed that the country has 78% voluntary blood donations with 61% repeat blood donations. However, COVID-19 pandemic has changed the ratio of voluntary donors (VD) to replacement donors (RD). The country still uses a fraction of whole blood (13%) at present. In COVID-19 pandemic an increase in seroreactivity for transfusion transmissible infections is seen for hepatitis B and syphilis. There is incentive for voluntary blood donation in the country. There is no national blood grouping reference laboratory, rare donor registry or hemovigilance at present.

4.3.5. Thailand

Ms. Pawinee Kupatawinto, Deputy Director, National Blood Centre of the Thai Red Cross Society, Bangkok, Thailand informed that the country has 100% voluntary blood donations with 76 - 80 % repeat donors. In COVID-19 pandemic, they observed increase in number of repeat blood donors, 6% collection from family/friend's donors and increase in percentage of transfusion transmissible infections in blood donors. They have found that direct calling of donors' is helpful in conversion of donations and incentives such as T-shirts increase VBD. The country has centralized blood collection and testing facility for TTIs with 100% individual unit Nucleic acid testing (ID-NAT), blood grouping and use leukoreduction, male only plasma, platelet additive solutions and the bacterial screening for blood components in Thailand. The country has a national hemovigilance program with dedicated donor vigilance arm, have rare donor registries, and incentives for voluntary blood donation.

5. FOUNDATION & QUALITY ASSURANCE OF A VOLUNTARY BLOOD DONATION PROGRAM

5.1. Setting up of a Blood Donation Program – assessment of blood and components requirements in the region and planning for voluntary blood donation

Dr Veera Nadarajan took a general overview of blood donations based on the WHO Global Data Base on Blood Safety, stressed on the need of estimation that are practical and a practical approach to setting up blood collection and donor management including data management. Effective donor information system for post donation counselling and testing should be in place & further emphasized that all should have access to safe and adequate blood components irrespective of variation in socio economic/demography.

5.2. Code of ethics in voluntary blood donation

Dr Lin Fung explained the International Society of Blood Transfusions (ISBT) code of ethics for donors and recipients and their relevance for clinical implications in the current times for the transfusion services for donor and recipient safety. The presentation

covered the topic right from the origin of the search for the code of ethics, the principles of biomedical ethics, autonomy, non-maleficence, beneficence, justice and dignity and the stewardship of cause.

5.3. *Critical Quality Control Checks in the blood donation process*

Dr. Hem Chandra Pandey discussed the critical control points need to be identified, mapped, and monitored for establishing quality in the process of blood donation. The mapping starts from registration, history questionnaire, haemoglobin screening, mini physical examination, identification of donor with the labelled blood bags and pilot sample evacuated tubes, arm disinfection, gentle mixing and monitoring volume of collection and all activities are important for the donor and recipient safety.

5.4. *Quality indicators of the blood donation program*

Prof. Rajendra Chaudhary explained about the quality indicators in the blood donation in an almost bench to bedside manner. He defined the quality indicators, explained the objectives behind the need, types, how to develop quality indicators with simple lucid examples for the audience. He stressed on the importance of QIs role as a tool for quality management system and highlighted that the stakeholders to ensure that Qis are instituted in the right way for improving the quality of BTS.

6. BALANCING SAFETY WITH SUFFICIENCYIN CONTEXT OF VOLUNTARY BLOOD DONATIONS

6.1. *Principles of voluntary blood donor recruitment and retention*

Prof. Sitalakshmi Subramanian explained about good donor management and blood safety, the elements of good donor management, the importance of a safe donor, donor recruitment and retention strategies with reference to the four goals and the twenty

well defined strategies as per the WHO in the endeavour towards 100% voluntary blood donation.

6.2. *Selection of a safe whole blood and component donor*

Dr. Gopal Patidar spoke about the importance, evolution, evidence behind the donor selection criteria and on the assessment of questionnaire for blood donor selection. Donor selection criteria are the first line of defence for blood safety and should be prepared keeping in mind the safety with the self-sufficiency and tailor made for the geographic area.

6.3. *Role of family / friends and youth as blood donors in the region*

Dr. Ajju Agnihotri spoke on the issue of the need to both family and friend's donors in addition to the voluntary blood donors as the unique need noted in South East Asia. The focus on VBD, should not ignore the easy availability, potential of turning in to repeat blood donors of the family and friend donors to ultimately strengthen repeat and safe blood donations, and advocated that this may be the 1st best step towards balancing safety with sufficiency in the region.

6.4. *Conversion of first-time blood donors into regular repeat blood donors*

Dr. Shamee Shastry spoke on the need to identify target donor population to understand the systematic approach towards the implementation of a quality system in blood donor recruitment and retention. The role of budgetary allocation, human resource, public information program having a dedicated organisational structure, with allocation of responsibility, standard operative procedures and donor data management for donor recruitment and retention. The emphasis on follow-up of donors, good relations with the donors, recognition of the donor's contribution, health education of the

donor and recall of donors. Monitoring and evaluation of the entire donor program.

6.5. *Counseling of blood donors – the Donor & Recipient Safety*

Dr. Nidhi Bhatnagar spoke on the spectrum of donor counseling, starting from the pre-requisites for such a system – need of the trained counselors, congenial atmosphere, up-to-date knowledge of the counselor, and the need of confidentiality, defined roles and responsibilities and SOPs for having a quality system in counseling services. The right of the donor to have information on the blood collection process, screenings tests and their result, blood requirements, storage and utilization, reason of deferral, post donation care and special precariousness post donation.

6.6. *Donor vigilance*

Dr. Akanksha Bisht spoke on the evolution of the hemovigilance program of India (HvPI) and the addition of the donor vigilance module on 14 June in the year 2015, the donor-vigil indigenously developed software by the team of National Institute of Biologicals (NIB), India. The compilation of the donor vigilance data has brought out recommendations for improving the donor questionnaire and examination, the need to reduce anxiety in first time young age donors, need to improve training on phlebotomy and improve post donation care and vigilance for at least up to 30 minutes post donation and the early identification and management of first reaction to prevent secondary reaction and injury.

6.7. *Role of information technology in sustaining voluntary blood donations*

Dr. Satyam Arora spoke that information technology has been an essential part of modern blood banking and transfusion medicine. The optimal use of social media and online tools can greatly enhance

the donor motivation and recruitment process, whereas at the same time correct and authentic information needs to put in public domain.

7. BLOOD DONATION PROCESS AND DONOR ROOMPROCEDURES

7.1. *Blood donation process, post donation care and counseling*

Dr. Rahul Katharia spoke in detail about the steps in the blood donation process, with special reference to the technique of donor arm disinfection, technique of donor phlebotomy, counseling during blood donation and post donation care and information to the blood donor.

7.2. *Classification of adverse donor reactions*

Prof. Ravneet Kaur spoke on the need of common consensus on classification of adverse donor reactions, the updated 2014 International Hemovigilance Network (IHN), International Society of Blood Transfusion (ISBT) and American Association of Blood Banks (AABB) detailed classification, which has been adopted in the Hemovigilance program of India. The talk detailed about the examples of each type of donor reaction.

7.3. *Management of adverse donor reactions*

Prof. Sangeeta Pahuja spoke on the recognition and management of the adverse donor reactions as per the IHN, ISBT & AABB classification with some detailed examples in form of case studies, in addition to the need of institution of preventive measures.

7.4. *Interventions to mitigate adverse donor reactions*

Dr. Aseem Kumar Tiwari spoke on improving donors' psychology, physiology and making process improvements in the blood donation chain to prevent vasovagal reactions and increase donor retention. He highlighted the need to "Thank the donor" on at least 3 occasions

(reception, phlebotomy, and post refreshments) and on the need of institution of simple measures like water ingestion pre donation and applied muscle tension apart from the role of counseling in breaking the anxiety of the donor.

8. ROLE OF BLOOD DONOR ORGANIZERS / ASSOCIATIONS IN VOLUNTARY BLOOD DONATIONS

8.1. India – North

Prof. Tulika Chandra discussed the scenario of VBD in northern India. The talk dwelled upon the role of voluntary blood donor organizations and the role incentives in the movement. The role of conversion of replacement blood donors in to voluntary blood donors and camp organisers.

8.2. India – South

Dr. Ankit Mathur discussed the scenario of VBD in the information technology hub of southern India. The advantages of such structure VBD movement wherein major reliance is on the corporates and the challenges faced in wake of COVID-19 in not having an all-inclusive blood donation movement was adequately highlighted.

8.3. India – West

Dr. Nidhi Bhatnagar discussed the unique features of a blend of having social marketing, information technology and voluntary blood donor organisations with benefits of having a structured “donor call centre”. The talk also included the necessary adaptations in the blood donation in wake of COVID-19.

8.4. India – East

Dr. Somnath Mukherjee discussed the unique features of voluntary blood donor organisations in the regions with emphasis on role of the forum of voluntary blood donors of West Bengal, and local

bodies in the mass movement of blood donation under such organisations.

9. SUSTAINABLE VOLUNTARY BLOOD DONATION PROGRAM IN THE SOUTH EAST ASIA

9.1. Sustaining voluntary blood donations in the wake of COVID-19 pandemic disaster

Dr. Suchet Sachdev discussed on the challenges imposed on the BTS in wake of disasters, with emphasis of COVID-19 pandemics. The need to institute changes in blood donation for ensuring safety of the donors, staff and balancing the safety with self-sufficiency. The need to follow the WHO guidelines for ensuring blood donations in pandemics of respiratory origin and actual success of following the WHO guidelines at a blood centre of an institute of national importance in northern India.

9.2. Blood donation challenges during COVID-19 pandemic in Norway

Dr. Karin Magnussen spoke on the challenges imposed by COVID-19 pandemic on the blood services in a developed economy nation.

9.3. Sustainable Development Goals in the Journey Towards 100% Voluntary Blood donations in South East Asia – Panel Discussion

Panel question	NEPAL	BANGLADESH	INDONESIA	THAILAND
Voluntary blood donation incorporated in the school/college curriculum?	No	Yes	No	No (Yes, in colleges)
Voluntary blood donation drives on Parent Teacher Meeting occasions in Schools?	No	No	No	Yes
Voluntary blood donation activities by students (such as Red Ribbon Club/Red Cross/National Service Scheme) in colleges?	Yes	Yes	Yes	Yes
Voluntary blood donation activity undertaken by Government institutions?	Yes	Yes	Yes	Yes
Voluntary blood donation activities conducted as part of Corporate Social Responsibility by the Industry/Corporate/Media House?	Yes	Yes	Yes	Yes
Special leave for donating blood?	No	No	Yes, in special situations only	No
Reimbursement of donor travel?	No	No	NO, only incentives	No (Discounts by Corporate taxi services)

10.RECOMMENDATIONS

The training was conducted to understand the foundations of a structured voluntary blood donation programme for provision of sustainable, safe, quality assured blood and blood components supply in the South East Asia Region.

The experts dwelt upon and arrived upon the following consensus

1. There must be National and/or State commitment towards provision of resources for ensuring a safe and sustainable voluntary blood donation program

2. National Blood Policy and an effective regulatory framework must be in place
3. Voluntary Non-Remunerated Blood Donation preferred source of blood supply
4. Effective donor motivation and recruitment strategies-regional cultural and socio-demographics
5. Effective communication in the community with various target groups and creating awareness by providing information at primary/high school/university level
6. Effective Information Education & Communication for augmenting voluntary blood donations
7. Utilization of Information technology platform for boosting voluntary blood donations
8. Emphasis must be laid down on converting 1st time VBD and family donors as regular repeat blood donors
9. Principals and code ethics must be followed in dealing with Volunteer Donors
10. Evidence based, well defined donor screening criteria taking into consideration the local, regional, and geographical variations
11. Pre donation counselling, Blood collection in a quality assured manner to minimize donor adverse events
12. Implementation of donor adverse event mitigation strategies for improving donor retention
13. Post donation donor care and counselling
14. Implementation of critical quality control checks in the blood donation process
15. Implementation of quality indicators for surveillance of the blood donation program and process

16. Robust donor Hemovigilance programme to improve the process of blood collection and donor care
17. Implementation of donor database systems
18. Fixed blood donations sites
19. Brand ambassadors to promote VBD
20. Training programs for voluntary blood donor organizations
21. Knowledge, attitude, and practices studies to identify the gaps in the blood donation
22. Studies on the blood donor's psychology, supported by the WHO.

Annexures

1. Scientific Committee, Secretariat & Experts

Scientific Committee

Prof. Neelam Marwaha, Advisor

Dr. Aparna Singh Shah, Advisor

Prof. Rajendra Chaudhary, Chair

Prof. Sitalakshmi Subramanian, Co-Chair

Prof. Ratti Ram Sharma, Co-Chair

Dr. Shamee Shastry, Member

Dr. Suchet Sachdev, Member-convener

Secretariat: Department of Transfusion Medicine, Level 3, Nehru Hospital, Postgraduate Institute of Medical Education & Research, Chandigarh, India-160012

+91-172-276481, 86

Email: transfusionmed63@gmail.com, rrspgi@gmail.com,
suchet.sachdev@gmail.com

2. Programme

Day 1; 07-10-2021 (Thursday)		
GMT – Hrs (IST) 5:45AM - 6:15AM (11:15 AM-11:45AM)	INAUGURAL SESSION	
5:45AM - 5:50AM (11:15AM-11:20AM)	Opening Welcome Remarks, PGIMER, Chandigarh	Prof. Jagat Ram Director, PGIMER, Chandigarh, India.
5:50AM – 5:55AM (11:20AM-11:25AM)	Regional Director's Message delivered on World Blood Donor Day, 2021.	Presented by HSD-WHO-SEARO, New Delhi, India.
5:55AM – 6:00AM (11:25AM-11:30AM)	Welcome Message	Dr. Neelam Marwaha Former Prof & Head Department of Transfusion Medicine, PGIMER, Chandigarh, India.
6:00AM – 6:15AM (11:30AM-11:45AM)	Vote of Thanks	Prof. Ratti Ram Sharma Head, Department of Transfusion Medicine, PGIMER, Chandigarh, India.

Day 1; 07-10-2021 (Thursday)			
GMT – Hrs (IST) 6:15AM – 10:15AM (11:45AM–3:00PM)	Topic	Speaker	Chairpersons
SESSION - I	UNDERSTANDING THE UNIQUE CHALLENGES IN VOLUNTARY BLOOD DONATIONS IN SOUTH EAST ASIA.		Dr. Aparna Singh Shah Regional Advisor, SEARO, WHO, New Delhi, India. Dr. Philippa Hetzel WHO Collaborating Centre Quality, Australia. Dr. Rajendra Chaudhary SGPGI, Lucknow, India Dr. Ratti Ram Sharma PGIMER, Chandigarh, India.
6:15AM-6:30AM (11:45AM-12:00PM)	World Health Organization - Towards 100% Voluntary Blood Donations	<u>SOUTH EAST ASIA REGIONAL SCENARIO:</u> Dr. Aparna Singh Shah Regional Advisor, SEARO, WHO, New Delhi, India.	
6:30AM-6:45AM (12:00PM – 12:15PM)		<u>WESTERN PACIFIC COUNTRY SCENARIO:</u> Dr. So-Yong Kwon Blood Service Headquarters Korean Red Cross	
6:45AM-7:00AM (12:15PM - 12:30PM)	Current Status of Whole Blood & Component Donations & Challenges in the Self Sufficiency of Blood and Components in South East Asia	Dr. Lakshman Edirisinghe, WHO Collaborating Centre, Blood Transfusion Services, Sri Lanka.	
7:00AM-7:15AM (12:30PM – 12:45PM)		Dr. Manita Rajkarnikar Director, Nepal Red Cross Society, Nepal.	
7:15AM-7:30AM (12:45PM - 1:00PM)		Dr. Md. Ashadul Islam, Senior Vice President, Blood Transfusion Society, Bangladesh.	
7:30AM-7:45AM (1:00PM – 1:15PM)		Dr. Teguh Triyono, Chair, Indonesia Committee for Blood Transfusion, Indonesia.	
7:45AM-8:00AM (1:15PM – 1:30PM)		Ms. Pawinee Kupatawintu WHO Collaborating Centre, Blood Transfusion Services, Thailand.	
8:00AM-8:15AM (1:30PM – 1:45PM)		DISCUSSION & FEEDBACK	
SESSION - II	FOUNDATION & QUALITY ASSURANCE OF A VOLUNTARY BLOOD DONATION PROGRAM		
8:15AM-8:35AM (1:45PM – 2:05PM)	Setting up of Blood Donation Program - assessment of blood and components requirements in the region and planning for voluntary blood donation.	Dr. Veera Nadarajan, University of Malaya, Malaysia.	
8:35AM-8:55AM (2:05PM – 2:25PM)	Code of ethics in voluntary blood donations	Dr. Lin Fung University of Sunshine Coast, Australia.	
8:55AM-9:15AM (2:25PM – 2:45PM)	Critical Quality Control Checks in blood donation process	Dr. Hem Chandra Pandey, AIIMS, New Delhi, India.	
9:15AM-9:35AM (2:45PM – 3:05PM)	Quality indicators of blood donations program	Dr. Rajendra Chaudhary, SGPGI, Lucknow, India.	
9:35AM-9:55AM (3:05PM – 3:25PM)	Q/A - DISCUSSION & FEEDBACK		

Day 2; 08-10-2021 (Friday)			
GMT – Hrs (IST) 5:30AM – 10:00AM (11:00AM - 3:30PM)	Topic	Speaker	Chairpersons
5:30AM – 5:40AM (11:00AM - 11:10AM)	Recap (Day- 1)	Dr. Suchet Sachdev, PGIMER, Chandigarh.	Dr. Apama Singh Shah Regional Advisor, SEARO, WHO, New Delhi, India. Dr. Teguh Triyono, Chair, ICBT, Indonesia. Dr. Rajendra Chaudhary SGPGI, Lucknow, India Dr. Susheela Innah Jubilee Mission Medical College, Kerala, India. Dr. Sangeeta Pathak Max Hospital, New Delhi, India. Dr. Ratti Ram Sharma PGIMER, Chandigarh, India.
SESSION – I	BALANCING SAFETY WITH SUFFICIENCY IN CONTEXT OF VOLUNTARY BLOOD DONATIONS.		
5:40AM – 6:00AM (11:10AM - 11:30AM)	Principles of voluntary blood donor recruitment and retention	Dr. Sitalakshmi Subramanian St John’s Medical College, Bangalore, India.	
6:00AM – 6:20AM (11:30AM – 11:50AM)	Selection of a safe whole blood and component donor	Dr. Gopal Kumar Patidar AIIMS, New Delhi, India.	
6:20AM – 6:40AM (11:50AM – 12:10PM)	Role of family / friends and youth as blood donors in the region	Dr. Ajju Agnihotri Nayati Medicity, Mathura, India.	
6:40AM – 7:00AM (12:10PM – 12:30PM)	Conversion of first – time blood donor into regular repeat blood donors	Dr. Shamee Shastry Kasturba Medical College, Manipal, India.	
7:00AM – 7:20AM (12:30PM – 12:50PM)	Counseling of blood donors- The Donor & Recipient Safety	Dr. Nidhi Bhatnagar, BJ Medical College, Ahmedabad, India.	
7:20AM – 7:40AM (12:50PM – 1:10PM)	Donor Vigilance	Dr. Akanksha Bisht, National Institute Biologicals, Noida, India.	
7:40AM – 8:00AM (1:10PM – 1:30PM)	Role of information technology in sustaining voluntary blood donations.	Dr. Satyam Arora, Postgraduate Institute of Child Health, Noida, India.	
8:00AM – 8:15AM (1:30PM – 1:45PM)	Q/A – DISCUSSION & FEEDBACK		
SESSION - II	BLOOD DONATION PROCESS AND DONOR ROOM PROCEDURES.		
8:15AM- 8:35AM (1:45PM – 2:05PM)	Blood donation process, post donation care and counseling	Dr. Rahul Katharia SGPGI, Lucknow, India.	
8:35AM-8:55AM (2:05PM – 2:25PM)	Classification of adverse donor reactions	Dr. Ravneet Kaur GMCH, Chandigarh, India.	
8:55AM-9:15AM (2:25PM – 2:45PM)	Management of adverse donor reactions	Dr. Sangeeta Pahuja Lady Harding Medical College, New Delhi, India.	
9:15AM- 9:35AM (2:45PM – 3:05PM)	Interventions to mitigate adverse donor reactions	Dr. Aseem Kumar Tiwari Medanta The Medicity, Gurugram, India.	
9:35AM- 10:00AM (3:05PM – 3:30PM)	Q/A – DISCUSSION & FEEDBACK		
			Dr. Ratti Ram Sharma PGIMER, Chandigarh, India

Day 3; 09-10-2021 (Saturday)			
GMT – Hrs (IST) 5:30AM – 8:00AM (11:00AM–2:00PM)	Topic	Speaker	Chairpersons
5:30AM – 5:40AM (11:00AM - 11:10AM)	Recap (DAY 2)	Dr. Suchet Sachdev, PGIMER, Chandigarh.	Dr. Aparna Singh Shah Regional Advisor, SEARO, WHO, New Delhi, India.
SESSION - I	ROLE BLOOD DONOR ORGANIZERS / ASSOCIATIONS IN VOLUNTARY BLOOD DONATION.		
5:40AM – 5:50AM (11:10AM – 11:20PM)	India – North	Dr. Tulika Chandra, KGMU, Lucknow, India	Dr. Lakshman Edirisinghe, Director, NBTC, Sri Lanka.
5:50AM – 6:00AM (11:20PM – 11:30PM)	India – South	Dr. Ankit Mathur, BMST Blood Centre, Bangalore, India.	Dr. Sitalakshmi Subramanian SJ Medical College, Bangalore, India.
6:00AM – 6:10AM (11:30PM- 11:40PM)	India – West	Dr. Nidhi Bhatnagar, BJMC, Ahmedabad, India.	Dr. Rajendra Chaudhary SGPGI, Lucknow, India.
6:10AM – 6:20AM (11:40PM-11:50PM)	India – East	Dr. Somnath Mukherjee, AIIMS, Bhubaneswar, India.	Dr. Sangeeta Pathak, Max Super Specialty Hospital, New Delhi, India.
6:20AM – 6:30AM (11:50PM-12:00PM)	Q/A – DISCUSSION & FEEDBACK		Dr. Ratti Ram Sharma PGIMER, Chandigarh, India. MODERATORS Dr. Sangeeta Pathak, Max Super Specialty Hospital, New Delhi, India. Dr. Suchet Sachdev, PGIMER, Chandigarh, India.
SESSION - II	SUSTAINABLE VOLUNTARY BLOOD DONATION PROGRAM IN SOUTH EAST ASIA.		Dr. Aparna Singh Shah Regional Advisor, SEARO, WHO, New Delhi, India.
6:30AM – 6:50AM (12:00PM-12:20PM)	Sustaining Voluntary Blood donations in the wake of viral pandemic disasters	Dr. Suchet Sachdev, Chandigarh.	Dr. Manita Rajkarnikar Director, NRCS, Nepal.
6:50AM – 7:10AM (12:20PM – 12:40PM)	Blood donation challenges during COVID-19 pandemic in Norway	Dr. Karin Magnussen Norway.	
7:10AM – 8:00AM (12:40PM-1:30PM)	Sustainable Development Goals in The Journey Towards 100% Voluntary Blood Donation in South East Asia (PANEL DISCUSSION & RECOMMENDATIONS)	Dr. Lakshman Edirisinghe, Sri Lanka.	Dr. Karin Magnussen Norway.
		Dr. Rekha Manandhar Nepal.	Dr. Veera Nadarajan Malaysia
		Dr. Md. Ashadul Islam, Bangladesh.	Dr. Rajendra Chaudhary SGPGI, Lucknow, India
		Dr. Teguh Triyono, Indonesia.	Dr. Ratti Ram Sharma PGIMER, Chandigarh, India.
		Ms. Pawinee Kupatawintu Thailand.	
	Q/A – DISCUSSION - FEEDBACK AND RECOMMENDATIONS (20 MINUTES)		

3. List of Experts

Name	Affiliation
Dr. Aparna Singh Shah	Regional Advisor, Blood, Blood Products, Products of Human Origin, IPC, & Patient Safety, Department of Health Systems Development, World Health Organization, Regional Office for South-East Asia, New Delhi, India
Dr. Lakshman Edirisinghe	Director, National Blood Transfusion Service, World Health Organization Collaborating Centre, Sri Lanka
Dr. Manita Rajkarnikar	Director, Nepal Red Cross Society, Nepal
Dr. Md. Ashadul Islam	Professor, Department of Transfusion Medicine & Ex- Additional Registrar – 1, Bangabandhu Sheikh Mujib Medical University, Shahbag, Dhaka, Bangladesh
Dr. Teguh Triyono	Chair of Indonesia Committee for Blood Transfusion, Indonesia.
Ms. Pawinee Kupatawintu	Deputy Director, National Blood Centre, Thai Red Cross Society, Thailand
Dr. So-Yong Kwon	Director, Blood Safety Bureau, Korean Red Cross Blood Services Headquarters, 50, Hyeoksin-ro, Wonju-si, Gangwon-do 26465, Republic of Korea
Dr. Rekha Manandhar	Senior Consultant Pathologist National Public Health Laboratory Co-ordinator, NBBTS Teku, Kathmandu, Nepal
Dr. Karin Magnussen	Medical Director Blood Center and Medical Biochemistry, Innlandet Hospital Trust, Norway
Dr. Yoke Lin Fung	Associate Professor in Medical Laboratory Science, School of Health & Behavioural Sciences, University of the Sunshine Coast. Australia
Dr. Veera Nadarajan	Head, Department of Transfusion Medicine, Malaya Medical Centre,

	University of Malaya, Malaysia
Dr. Philippa Hetzel	Director, National Reference Laboratory (NRL), Melbourne VIC, Australia
Dr. Rajendra Chaudhary	Professor & Head Department of Transfusion Medicine, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, Uttar Pradesh, India
Dr. Sitalakshmi Subramanian	Professor and Head Dept of Transfusion Medicine and Immunohematology St John's Medical College and Hospital Bangalore, Karnataka, India
Dr. Ratti Ram Sharma	Professor & Head Department of Transfusion Medicine, PGIMER, Chandigarh, India
Dr. Jayashree Sharma	Professor & Head Department of Transfusion Medicine, King Edward Memorial Hospital and Seth Gordhandas Sunderdas Medical College, Parel, Mumbai, India
Dr. Tulika Chandra	Professor and Head Department State of Art Model Blood Bank Department of Transfusion Medicine, King George Medical University, Lucknow, Uttar Pradesh, India
Dr. Meena. Dharmadas	Professor and Head Department of Transfusion Medicine Government Medical College Thiruvananthapuram, Kerala, India
Dr. Susheela Jacob Innah	Professor & Head Department of IHBT, Jubilee Mission Medical College, Thrissur, Kerala, India
Dr. Joy John Mammen	Professor Christian Medical College, Vellore, Tamil Nadu, India
Dr. Priti Elhence	Professor, Department of Transfusion Medicine, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, Uttar Pradesh, India
Dr. Ravneet Kaur	Professor & Head Department of Transfusion Medicine,

	Government Medical College & Hospital, Sector-32, Chandigarh, India
Dr. Nidhi Bhatnagar	Associate Professor & Head Department of IHBT, B. J. Medical College, Ahmedabad, Gujarat, India
Dr. Shamee Shastry	Professor & Head Department of Immunohematology, Kasturba Medical College, Manipal, Karnataka, India
Dr. Sangeeta Pathak	Head & Senior Consultant Transfusion Services Max Super Speciality Hospital, New Delhi, India
Dr. Sangeeta Pahuja Sindhwani	Professor and Head, Department of Immunohematology and Blood Transfusion, Lady Hardinge Medical College and Assoc Hospitals, New Delhi, India
Dr. Rahul Katharia	Additional Professor Department of Transfusion Medicine, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, Uttar Pradesh, India
Dr. Somnath Mukherjee	Additional Professor Dept. of Transfusion Medicine All India Institute of Medical Sciences Bhubaneswar, Orissa, India
Dr. Aseem Kumar Tiwari	Director, Transfusion Medicine (Blood Bank) Medanta- The Medicity Hospital Gurugram, Haryana, India
Dr. Ankit Mathur	Additional Medical Director Consultant Transfusion Medicine & Transplant Immunology Rotary TTK Blood Bank Bangalore Medical Services Trust HAL III Stage Bangalore, Karnataka, India
Dr. Ajju Agnihotri	Senior Consultant Nayati Healthcare, Mathura, Uttar Pradesh, India
Dr. Akanksha Bisht	Member Secretary, Haemovigilance Programme of India, Government of India, Scientist Grade-II

	National Institute of Biological, Noida, Uttar Pradesh, India
Dr. Satyam Arora	Associate Professor Transfusion Medicine Super Speciality Pediatric Hospital and Post Graduate Teaching Institute, Noida, Uttar Pradesh, India
Dr. Hem Chandra Pandey	Assistant Professor Department of Transfusion Medicine, AIIMS, New Delhi, India
Dr. Gopal Kumar Patidar	Assistant Professor, Department of Transfusion Medicine, All India Institute of Medical Sciences, New Delhi, India
Dr. Suchet Sachdev	Associate Professor Department of Transfusion Medicine, PGIMER, Chandigarh, India