



Australian and New Zealand Society of Blood Transfusion
East Asia, Pacific Islands Travel Awards

TRAVEL AWARD RECIPIENT REPORT

Location of Meeting: Melbourne, Victoria, Australia

Dates of Meeting: 13-16 November 2016

Travel Award Recipient Name: *Sandra Semi*

Background of Recipient: *Quality Assurance Officer – Clinical Laboratory*

I am currently working in Samoa's National Health Services in the Clinical Laboratory division. As the QA, I oversee all test procedures with regards to quality. Hence I am required to understand not only the procedures but the principles and backgrounds of the test methods employed by our testing mechanisms. In addition to my QA position, I work as a lab technician in the Blood Bank and Haematology departments performing after hour duties.

Educational activities at the meeting:

Working in a blood bank laboratory in a developing country setting, I was amazed to hear about interesting on-bench experiences, medical innovations and scientific research on a number of topics as listed and explained below:

- *Disaster preparedness and recovery;* where 3 speakers shared their experiences on disasters that lead to massive blood transfusion in a certain time as well as the challenges encountered by blood bank services in various parts of the world as a result of disasters such as the September 11th in New York City, London Bombings in 2005, Christchurch earthquakes, and the 2015 Cyclone Pam in Vanuatu.
- *Pediatric Patient Blood Management;* where two speakers shared their knowledge and experience of blood management based on the International guidelines for neonatal and pediatric patients.

- Diagnostic Tools; where three speakers discussed the pros and cons of hematological tests such as;
 - Thromboelastography (TEG) as a method of testing the efficiency of blood coagulation
 - a shear based microfluidic device to monitor platelet function as opposed to von Willebrand disease screening
 - The effects of soluble platelet proteins that help evaluate thrombocytopenia and stratify bleeding risk.

- Hematological diseases in pregnancy; where speakers presented on Thrombocytopenia in pregnancy, recent updates on Alloimmunisation to red cells as the undesirable outcome of blood transfusion, as well as the practical management of blood cancer that is associated with pregnancy.

- Pediatric and Neonatal Transfusion; there were great presentations on the importance of RBC production and the distribution of oxygen in the blood, as well as the blood management of pediatric patients.

- Transfusion Reactions; Pathophysiology of hemolytic transfusion reactions, Pediatric transfusion reactions and Alloimmunisation.

- Resolving Tricky issues in the transfusion laboratory; speakers shared their knowledge and experiences on the following topics:
 - The immunohematology toolbox for solving complex antibody cases
 - Dealing with challenging antibodies
 - Antibody soup: Challenging transfusion management issues in thalassemia.

- Laboratory; This is the most important session for me as a lab worker and I was fortunate to learn new ideas and bench skills in dealing with massive transfusions for critically bleeding patients in other hospital settings within limited timeframes. The incidents covered in the talks are very much relevant and applicable to our lab setting. I also enjoyed listening to reviews of some reported cases of transfusion-related acute lung injury (TRALI), a pilot study which was conducted to determine the frequency, costs and outcomes of red blood cell transfusion in hospitalized patients, as well as hearing about blood transfusion and blood management practice in urban city hospitals with regards to gastrointestinal bleeding.

Information / knowledge gained from attending the meeting and Overall experience

Overall the meeting was a great opportunity for capacity building and professional development through hearing expert views of health professionals from diverse backgrounds on blood transfusion and its importance for patient management. Having majored in Microbiology, I also learnt a lot from presentations and panel discussions as senior medical scientists share their in-depth knowledge of clinical hematology and blood transfusion. After hearing a number of research projects and people's experience on blood transfusion and the science of hematology, I am very determined to learn much more on these topics that have become even more interesting to me.

In addition to my lessons learned from attending the meeting, I was also fortunate to be given the opportunity to visit a few blood bank laboratories in Melbourne where I was able to network with other lab scientists in other hospital lab settings. I can actually say that this is the most fruitful part of my trip as both a Technician and a QA officer.

Furthermore I was able to relate to standard operating procedures in other blood banks with regards to quality control of blood products and all the important steps involved in assuring safe transfusion. I mostly enjoyed my whole day tour in the Red Cross Blood Service as I managed to pick up a lot of quality procedures that are applicable to my workplace.

As a success, our lab is now following very similar strategies namely the 5s' and LEAN approach to ensure that we are providing the best service we can offer.

Comments and Feedback

I would like to formally thank the Organising Committee of the HAA conference, the Sponsors and especially the Australian & New Zealand Society of Blood Transfusion for the great opportunity, funded by the ISBT. I learnt so much more than what I had initially expected. I am very grateful to be part of this well organised meeting and to network with health professionals from different parts of the globe.

Roselyn Livae attended the Annual Scientific Meeting of the HAA2016, Melbourne Australia supported by a travel grant from the ISBT.

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