



VITAL ANAESTHESIA SIMULATION TRAINING

VAST Facilitator Course and VAST Course

San Pedro Sula, Honduras, 6-10 December 2022

Patty Livingston and Carolina Haylock-Loor



Executive summary

Situation

At the request of Dr Carolina Haylock-Loor (Director of Programs for the World Federation of Societies of Anaesthesiologists), the Vital Anaesthesia Simulation Training (VAST) Course and Facilitator Course (VAST FC) were introduced in Latin America.

Background

The VAST Course was developed to teach and reinforce essential clinical practices and non-technical skills for both anaesthesia providers and perioperative teams. VAST was first piloted in 2018. Since then, VAST's courses have been offered 52 times to participants from 28 countries. The language of teaching has always been English, with occasional concurrent translation to local languages during courses. Prior to the courses in Honduras, Dr Haylock-Loor arranged for a significant amount of the VAST Course materials be translated into Spanish by bilingual participants planning to attend the VAST FC. This allowed the VAST Course to be delivered almost entirely in Spanish to a multidisciplinary group of healthcare practitioners who work in Honduras. The VAST FC materials have not yet been translated as the intention was that this course be taught in English. Due to the complexities of simulation facilitation, the VAST FC was in fact taught with a mix of Spanish and English. This improved understanding but the time required for translation made it necessary to omit portions of the VAST FC.

Assessment

Both courses were received with great enthusiasm and a desire for more training and practice. There was significant learning from the experience of delivering the training in a language other than English. This knowledge will inform future course delivery, as the first French courses are being planned for February 2023.

Recommendations

1. A VAST Latin America Steering Group, comprising graduates of the VAST FC, was formed with a mandate to support each other in expanding delivery of VAST's courses in Latin America. The group would like to prioritize course delivery in areas of greatest need, with an intention of delivering a one-day VAST FC refresher, the 3-day VAST Course and possibly VAST Wellbeing in the spring of 2023 in Guatemala (tentative dates June 19-24, 2023).
2. Completion of Spanish translation of all VAST's materials.
3. Creation of a short glossary of simulation terms used in VAST's courses in English and Spanish, with the goal of creating a similar glossary for French prior to the courses planned for early 2023.
4. Creation of a VAST facilitator cognitive aid with one side devoted to a stepwise approach to facilitation and the reverse to outline a framework for debriefing.
5. Apply lessons learned from this experience to the delivery of upcoming courses in French.
6. Consider omitting the scenario design exercise in the VAST FC when the course is being run in a language other than English or to participants with no prior exposure to VAST.

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Acknowledgements

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- World Federation of Societies of Anaesthesiologists (WFSA)
- Royal College of Physicians and Surgeons of Canada
- Honduran Anesthesia Society (SHARD)
- Department of Anesthesia, Pain Management and Perioperative Medicine, Dalhousie University

Attendees

VAST Facilitator Course			
Name	Professional role	Course role	Workplace
Carolina Haylock-Loor	Anesthesiologist	Course director	Honduras
Angela Enright	Anesthesiologist	Instructor	Canada
Patty Livingston	Anesthesiologist	Instructor	Canada
Sara Whynot	Research facilitator	Simulation coordinator	Canada
Fredy Ariza	Anesthesiologist	Participant	Colombia
Juan Carlos Duarte	Anesthesiologist	Participant	Venezuela
Geraldina Gross	Anesthesiologist	Participant	Honduras
Sandra Izquierdo	Anesthesiologist	Participant	Guatemala
Sandra Leal	Anesthesiologist	Participant	Bolivia/El Salvador
Cindy Montoya	Anesthesiologist	Participant	Honduras
Rodrigo Rubio	Anesthesiologist	Participant	Mexico
Mauricio Vasco	Anesthesiologist	Participant	Colombia

Bryan Hernandez-Lopez	Social worker	Simulation coordinator trainee	Honduras
Mirta Morales	Nurse educator	Simulation coordinator trainee	Honduras
Walter Villalta	X-ray technician	Simulation coordinator trainee	Honduras

VAST Course			
Name	Professional role	Course role	Workplace
Carolina Haylock-Loor	Anesthesiologist	Course director	Honduras
Angela Enright	Anesthesiologist	Instructor	Canada
Patty Livingston	Anesthesiologist	Instructor	Canada
Rodrigo Rubio	Anesthesiologist	Instructor	Mexico
Sara Whynt	Research facilitator	Simulation coordinator	Canada
Fredy Ariza	Anesthesiologist	Trainee facilitator	Colombia
Juan Carlos Duarte	Anesthesiologist	Trainee facilitator	Venezuela
Geraldina Gross	Anesthesiologist	Trainee facilitator	Honduras
Sandra Izquierdo	Anesthesiologist	Trainee facilitator	Guatemala
Sandra Leal	Anesthesiologist	Trainee facilitator	Bolivia/El Salvador
Cindy Montoya	Anesthesiologist	Trainee facilitator	Honduras
Mauricio Vasco	Anesthesiologist	Trainee facilitator	Colombia
Bryan Hernandez-Lopez	Social worker	Simulation coordinator trainee	Honduras
Mirta Morales	Nurse educator	Simulation coordinator trainee	Honduras
Walter Villalta	X-ray technician	Simulation coordinator trainee	Honduras
Alejandra Echeto	Anesthesiologist	Participant	Honduras
Claudia Alvarez	Anesthesiologist	Participant	Honduras
Jose Camacho Lainez	Anesthesiologist	Participant	Honduras
Zaida Zuniga Ramirez	Anesthesiologist		
Martha Molina Caballero	Anesthesia trainee	Participant	Honduras
Alejandra Ortega	Anesthesia trainee	Participant	Honduras
Dunia Mayorquin	Nurse	Participant	Honduras
Justa Norales	Nurse	Participant	Honduras
Karla Oseguera	Nurse	Participant	Honduras
Kenia Vindel	Nurse	Participant	Honduras
Elisa Mariela Herrera	Ob/gyn trainee	Participant	Honduras
Vanessa Zuniga Castellon	Ob/gyn	Participant	Honduras
José Rodríguez	Ob/gyn trainee	Participant	Honduras
Maria Elena Mariona	Anesthesiologist	Participant	Honduras

Venue and equipment

Venue

The courses were held in the Copantl Hotel and Convention Centre, a large facility in San Pedro Sula. The hotel had many advantages: beautiful grounds with mature trees and a large swimming pool; clean, well-appointed rooms; helpful staff; delicious food; and good meeting spaces. The hotel was a bustling hive of activity with weddings, Christmas parties, and World Cup matches playing loudly in the lobby. Because of the demands on the hotel for space, we were required to set up in three different areas during the five days of training. Despite these challenges, the hotel staff were most obliging and did their utmost to make the room changes as smooth as possible. Additionally, Sara and the simulation coordinator trainees were exceptional at recreating the VAST set up over and over.

Equipment

Dr Cindy Montoya, the President of the Honduran Anesthesia Society (SHARD), arranged with Dr. Geraldine Gross from San Pedro Sula Anesthesia society for most of the equipment, but some pediatric mannikins were brought by Dr. Sandra Izquierdo from Guatemalan Society AGARTD and Dr. Juan Carlos Duarte from Venezuelan Simulation center. The iPads and c-spine collars were brought from the Canadian VAST team.

VAST Facilitator Course

Preparation and translation

The participants of the VAST FC were involved for months prior to the course by translating course materials from English to Spanish and by working through the online preparation materials on the VAST Learning platform. Additionally, several participants are simulation experts. Huge thanks to Dr Michelle Gonzales (anesthesia trainee from Perth, Australia) for her hard work in translating the online VAST learning platform to Spanish.

Facilitation and debriefing practice

The bulk of the course involves practice of the four elements of VAST scenario facilitation: briefing, iPads/prompts, debriefing, and co-facilitation. Participants were divided into two groups to practice these skills while running scenarios for the other group. Meta-debriefings were conducted on the process of scenario facilitation.

Scenario design

Participants also worked in two groups to design new scenarios using the VAST scenario template. Each group ran its scenario for the other group. While the intention of this exercise is to give participants a deeper understanding of the mechanics of scenario design, the group felt that this time would have been better spent on facilitation and debriefing practice because of the time lost to translation. Recommendations were that when the VAST FC is introduced in a new language, it would be best to omit the scenario design exercise to allow more practice and feedback on the simulation facilitation and debriefing.

Application during the VAST Course

VAST FC graduates were assigned to facilitate and debrief all the VAST Course scenarios and to deliver the presentations. All the PowerPoint discussions had been translated into Spanish, including subtitles for the videos. This went well with a high level of participant engagement. As much as possible, meta-debriefings were conducted by Drs Enright, Haylock-Loor, Rubio and Livingston on the process of facilitation and debriefing. The newly trained facilitators found this feedback to be helpful.

VAST Course

The VAST Course was offered in Spanish to 14 multidisciplinary participants who work in San Pedro Sula, Honduras. These healthcare practitioners work together regularly and were able to discuss common challenges and solutions. Recurring themes were: the need of re-implementing the Surgical Safety Checklist in Honduran healthcare facilities; having briefing morning session for the OR day program; and implementation of debriefing at the end of the OR day. One of the barriers they expressed was rather the hierarchical nature of professional roles, especially surgeons, where nurses do not feel empowered to speak up. The participants appreciated the rich discussion on non-technical skills.

The skills sessions (difficult airway management, neonatal resuscitation, and primary trauma survey) were all conducted as PowerPoint presentations with concurrent demonstration of skills using mannikins (difficult airway management, neonatal resuscitation) or simulated patients (primary trauma survey). The iPads were used along with these demonstrations to show simulated vital signs.

Simulation coordinator training

Sara Whynot trained Bryan Hernandez-Lopez, Mirta Morales, and Walter Villalta as simulation coordinators. Bryan, Mirta and Walter, all Hondurans, were highly keen to learn and performed with exceptional capability. All simulation coordinators are to be commended. Sara speaks no Spanish and the three Honduras speak little English. Nevertheless, with creative use of google translate, rapid translation of voice messages, and sign language, the four quickly became a well-oiled machine. There is no doubt that Walter, Mirta and Bryan will be capable of supporting VAST Courses in the future. It was helpful to have them attend the VAST FC as participants.

Social life

Dr Carolina Haylock-Loor and her husband Dr Nelson Chinchilla kindly hosted the VAST FC attendees at her home for a delicious homecooked meal with her family. This offered some relaxing time with new friends and a lively discussion about the World Cup, currently underway. Dr Haylock-Loor hosted the group again, along with some other SHARD clinical leaders, for a taco dinner the evening of course completion. A highlight was listening to Nelson play his wonderful guitar music, accompanied by Andreas, their son. Since all the international visitors were staying at the same hotel, there were opportunities for relaxed dinners and social bonding. As there was great enthusiasm for watching one

of the World Cup matches, our team proposed running VAST Course Day 1 longer to allow space at the end of Day 2 for watching the Netherlands-Argentina match. This suggestion was met with great enthusiasm from the participants.

Course evaluations and informal feedback

VAST Facilitator Course feedback

[synopsis of comments]

What went well

- Methodology is easy to “take in”
- Thanks for being patient with me!!
- This is my first experience as facilitation training in simulation. It has been a great and useful experience.
- Fantastic experience
- I am happy with the course and am learning a lot
- Very interesting things to perform and do
- Thanks again for your patience
- Would not change anything
- For me it was an ideal day and I would not change anything
- Very useful and easy to access all the materials in the Spanish Dropbox folder
- The methodology of VAST information and file sharing is easy to follow
- Thanks so much for this great gift for educators in global health
- Sara is awesome; I want a clone of Sara to take to Colombia
- Carolina, Angela and Patty gave me a lot of good quality support during simulations
- Great organization from the local and international team

Challenges

- Need for more time for FC when translation is required; consider omitting the scenario design when teaching the FC to people who are unfamiliar with VAST or when in a new language
- Need more time to rehearse newly designed scenarios
- Need more time to rehearse the details for teaching the VAST Course
- Need to adapt course to Latin American culture
- Better to do VAST first as a participant before learning to be a facilitator
- Online material is astonishing, but some links don't work
- Amount of material and links is overwhelming; references are overwhelming
- Need more explanation of the program to know what to expect
- Less cognitive load; make everything about debriefing clear
- Have all the materials translated into Spanish
- Debriefing video is good but it can be difficult to understand what is being said

Take home messages

- Debriefing with good judgement
- How to make simple scenarios

- New techniques in education and simulation and how to help others learn non-technical skills that can help with future clinical performance
- That debriefing encourages reflection and enables teams to express thoughts, feelings and opinions
- Lead the conversation through “enquire, explore, and apply”
- Listening is important as well as making proper interventions at the right time
- Debriefing may empower participants to open their thoughts allowing correction of misunderstandings and knowledge deficits
- Have enough time for a good debriefing
- Learned a new way of teaching with respect and in a safe environment
- Listen to every participant and organize ideas before speaking
- Follow the script; do not get too technical; keep a beginner’s mind
- Sensitive dialogue focussing on the participant, not the facilitator, is a great way to make important changes
- VAST methodology is focussed on other important aspects of health professional behaviour beyond declarative knowledge; it is a fusion of mind and social skills; it provides a structured way to explore the thinking processes of learners
- Be flexible; use good conversational techniques; make the script so participants can read it and stick to it
- Keep scenarios simple and speak less in debriefing
- Generate respectful and safe questions to lead the participants in Analysis
- Teaching ANTS is crucial to patient safety
- Genuine curiosity; advocacy enquiry
- Ask the team for advice to avoid fixation error
- Keep scenario instructions clear

Recommendations

- Suggestion for an online forum for debriefers to discuss challenging debriefs
- A global infographic
- Cognitive aids for facilitators
- Create a glossary of VAST terminology and translate to Spanish
- Reinforce the positive with debriefings
- The demonstration along with the PowerPoint discussions worked well
- Consider omitting the scenario design component of the VAST FC when offering the course in a language other than English

VAST Course

[comments translated from Spanish with google translate]

What went well

- [from various participants] At the moment, I consider that the course is excellent, nothing to improve [several], so far so good, everything was excellent, excellent [many such comments], nothing to add, I’m loving it [several], great!!, a very nice course!
- Day 2 was really good, especially the part about burnout
- As the course progresses, the simulations are more fluid and with greater confidence

- The simulations are performed better and better each day [several comments]
- The topic of trauma was impeccably done by Dr Juan Carlos Duarte. Mauricio Vasco made a super clear and well directed trauma patient demonstration for everyone
- Reminding everyone that comments in debriefing are not criticism but constructive in a trusting environment

Challenges

- Try to shorten the course to longer days but fewer days because of challenges of getting time off work [one comment]

Take home messages

- I find it interesting how the simulation shows that we can still improve in our everyday activities
- Detect fixations and handle them
- Closed loop communication x 3
- Role delegation x 2
- Improving non-technical skills will help us achieve greater efficiency in the operating room; non-technical skills; non-technical skills apply to all members of the team [multiple comments on non-technical skills]
- Completing the checklist is essential
- Use cognitive aids x 4
- Clear, assertive communication is essential in a crisis
- When you work together as a team, the work of anesthesia and surgery can be performed efficiently and safely [multiple comments on effective teamworking]
- As for help in a crisis and use SBAR, even if in a hurry
- Stay calm x 2
- Empathy with the patient and family
- Informed consent is important but should not delay lifesaving actions
- Trauma management

Action items

- Ensure cognitive aids and crisis manuals are available in the hospitals
- Use closed loop communication, SBAR and AMPLE
- Culture of gratitude posters and setting an example
- Use the checklist
- Learn when and how to say “no”
- Prepare pamphlets and pass them out in the operating rooms in different hospitals
- Educational campaign on cognitive aids
- Socialize with the teaching department in the hospital
- Crisis management workshops

Challenges and lessons learnt

The greatest challenge by far was adapting the VAST FC and VAST Course for delivery in a language other than English. It was helpful that many VAST FC participants had been involved in translating materials for the VAST Course, so there was some prior exposure. The key learning here was to allow more time for facilitation practice, either by adding an extra day to the VAST FC or by omitting the scenario design component when the course requires concurrent translation.

Another challenge identified was that other than Dr Haylock-Loor, the VAST FC participants had never experienced a VAST Course. There was discussion about the issue of facilitator training without prior experience in VAST, however, there was agreement that running a VAST Course – VAST FC – VAST Course (8 days) combination would be logistically impossible. There was significant value in applying new skills from the VAST FC during the VAST Course that immediately followed. The VAST FC participants are motivated to keep supporting each other with VAST training in their various countries. Through this, and a planned VAST FC refresher course, facilitators will become more comfortable with the material. There was a request from Dr. Leal for Salvador to be the next VAST Course venue, after Guatemala. Once we published in the social networks, countries like Ecuador and Bolivia are part of the list for the near future.

Recommendations

1. A VAST Latin America Steering Group, comprising graduates of the VAST FC, was formed with a mandate to support each other in expanding delivery of VAST's courses in Latin America. The group would like to prioritize course delivery in areas of greatest need, with an intention of delivering a one-day VAST FC refresher, the 3-day VAST Course and possibly VAST Wellbeing in the spring of 2023 in Guatemala (tentative dates June 19-24, 2023).
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Course Photos





<u>Group A</u> (Amelia)	<u>Group B</u> (Fanny)
Rodrigo	Sandra L.
Sandra I.	Fredy
JC	Mauricio
Cindy	Carolina
	Geraldina











