



**VITAL
ANAESTHESIA
SIMULATION
TRAINING**

**VAST Course - Barquisimeto, Venezuela
Hospital Universitario de Pediatría Agustín Zubillaga
22 – 24 November 2024**

Executive summary

Situation

The VAST course was successfully delivered to 13 people (11 physicians and 2 nurses) at Hospital Universitario de Pediatría Agustín Zubillaga (HUPAZ), Barquisimeto - (Estado Lara).

Background

Venezuelan Society of Anesthesia (SVA) runs its own simulation laboratory since 2010, offering opportunities to learn perioperative crisis management to anesthesiologists, residents and nurses through a wide variety of clinical scenarios. As part of a new approach to improve patient safety, SVA has decided to widen the focus of simulation training to other members of perioperative team, including surgeons, obstetricians and orthopedic surgeons, but no strategy had been decided until now. After initial training in México DF in April 2024, the Venezuela's VAST team decided to use VAST program for including people from other specialties in simulation training and start running courses very soon. We thought that the initial course should be held outside Caracas, the capital, to show better one of the main features of VAST, its portability, so we decided to take VAST course to Barquisimeto, one of the most important cities in the central zone of the country.

Assessment

All participants were very engaged during all sessions and were able to experience teamwork, regardless of belonging to different generations. The emphasis on non-technical skills was very important because, unanimously, the participants valued this approach as something they had not experienced before, which, together with the psychologically safe environment, allowed them to express themselves and act freely during scenarios and debriefings. Unfortunately, despite having insisted on inviting surgeons, obstetricians and pediatric surgeons, they finally did not participate, evidencing the strong tendency against which we must fight, that of the lack of multidisciplinary training as they are generally judged as unattractive.

Recommendations

We believe that we should continue to insist on the inclusion of people from other specialties in this type of training, which is why we believe that for the next courses, heads of service and/or program directors of the other specialties should be approached and engaged to sensitize them to promote the participation of their colleagues with a view to improving the perioperative care of surgical patients. One of the best ways to demonstrate to them the usefulness of this training is to organize more courses in which some of their colleagues can be involved and that they can be exposed to the VAST experience and thus promote it among their peers.

Context and background

Due to the growing centralization of many of the educational activities that are carried out in the area of health in the country, motivated by logistical and public service reasons, we thought it convenient to organize this first VAST course in a city other than Caracas in order to demonstrate the benefits of the training that this program offers, but also to be able to make visible one of its great attributes, the ease of implementing it in places where there is no area designed and/or built specifically for clinical simulation. This portability feature can provide the opportunity for more "democratic" access to high-quality clinical simulation in the different cities of the country without the need to travel to the capital or to a few other cities that have a dedicated infrastructure for this purpose.

This is how the joint concern of a group of Anesthesiologists belonging to the Lara section, led by Dr. José Gonzalo Gudiño, who is also a member of the board of directors of the SVA, and Dr. Nerio Bracho, Coordinator of the Education chapter of the SVA, was born to organize this first course in Barquisimeto, specifically at the headquarters of the Agustín Zubillaga University Hospital of Pediatrics. This hospital, which houses residence programs for postgraduate courses in various pediatric medical and surgical specialties, due to its particular characteristics reflects very faithfully the health care model of the country's public hospitals, which today we can define as collaboratively segmented between the different disciplines involved in patient care, lacking training in transdisciplinary teams and with minimal or no exposure to simulation within of the postgraduate training and professional development of health care providers.

Funding and supporters

We gratefully acknowledge financial support from:

- ◇ GEVENMED S.A.
- ◇ Laboratorio Portugal
- ◇ BIOS Tecnología y Servicios C.A.
- ◇ Laboratorio Farmacéutico DYNALAB
- ◇ Sociedad Venezolana de Anestesiología

Their generous support made this VAST course possible

Facilitators and participants

The faculty was formed by Nerio Bracho, Daniel Sánchez, Diego Carrasquel and Juan Carlos Duarte, with the Venezuela's VAST Coordinator Migdalia Bello.

14 Participants registered for this course, coming mainly from Barquisimeto plus some others from neighbor cities. One of them, dropped off the day before because of Laboral issues, so we had 13 people attending to the course:

Nº	NAME AND SURNAME	Clinical role	PLACE OF WORK
1	Yeniree José Camacaro Gómez	Attending Anesth	Carora
2	Korint Daniela Carrillo Pérez	PGY3 Anesthesia	HUCAMP Bqto
3	Bonellys Omaira Moreno Carrillo	Attending Anesth	IVSS Bqto.
4	Mariaelvira Francisco Oviedo	Attending Anesth	HUCAMP. Bqto
5	Yurianny Pilar Peraza Velazco	PGY3 Anesthesia	HUCAMP. Bqto
6	Rossana Mildred Munive González	Attending Anesth	IVSS Bqto.
7	Betsabé Duno Alvarez.	Attending Anesth	IVSS Bqto.
8	Adriana Yurima Toyo Páez	Attending Anesth	IVSS Bqto.
9	Pedro José Parra Montilla	Attending Anesth	IVSS Bqto.
10	José María Suarez	Attending Anesth	IVSS Bqto.
11	José Gonzalo Gudiño Romero	Attending Anesth	IVSS Bqto.
12	Karen Victoria Martínez Toledo	PICU Nurse	HUPAZ Bqto
13	Sahyli Yhoselyn Colmenárez Marchan	Nurse	HUPAZ Bqto

Venue and logistics

This course was conducted at the HUPAZ, which made available two spaces for running all the activities. We had a small meeting room at second floor, which was used for discussion sessions and workshops, and a big multipurpose room, which was split into 2 sim rooms where the clinical scenarios were run. There was a small area outside of sim rooms where coffee breaks and lunches were had and some of the pharmaceutical laboratories were able to show some of their products.

We were able to have all the materials and equipment necessary for this type of course, and that was possible thanks to the effort of the local organizing group and thanks to the support of the HUPAZ, by providing two anesthesia machines that we were able to use in some of the scenarios. Eric's clothes, name badges, cognitive aids, posters were brought from Caracas, and the manuals were printed in Barquisimeto.

Unfortunately, due to major maintenance of the power service scheduled 48 hours before, we were advised that we would not be able to carry out any activities in the hospital on Sunday, November 24, so we decided to reorganize the program to be carried out in two days instead of three. Despite having had to take two long days, the participants were very satisfied, and we thought that this effort not to suspend the course was worth it

Summary of evaluations

Most of the evaluations strongly agreed in that the training was engaging and relevant and that they will be using the learned skills during the 2 days. They highly valued several aspects of the course, such as the fact that they could be active participants in the scenarios, the use of cognitive aids such as SBAR and ABCD, being able to follow protocols, the emphasis on the use of non-technical skills during the scenarios, the focus of debriefings and discussion sessions and the interaction developed during them, and last but not least, they were grateful for the opportunity to have been able to participate in a simulation activity which had not been offered to them until now.

Action items

- Make visible the protocols so they can be used any time by any one
- Develop and train teamwork culture
- Regular use of informed consent
- Learn to call for help
- Emphatic and closed-loop communication
- Become multipliers and supporters of this kind of training
- Make all needed efforts to “democratize” the access to clinical simulation

Challenges and lessons learnt

The biggest challenge we faced with this course was the fact of being able to work together for the first time as a team in charge of the organization and execution of a training of this type, which involves getting materials and equipment that are sometimes not easily available everywhere. We think that the decision was a real success because it allowed us to demonstrate to ourselves, as well as to the academic community, that there are no major excuses when deciding to carry out a training with high-quality simulation and that for future opportunities, VAST should be considered in any place that wishes to implement transdisciplinary training in perioperative care.

In addition, considering the current circumstances of the country, in which public services, such as electricity power, are unpredictable, always having a plan B, C, and D in mind will allow us to adapt to the various circumstances that may arise. This is how we managed to solve the fact of knowing at the last minute that we had to develop the program in 2 days instead of 3.

One remaining issue is the participation of other members of the perioperative team. Despite having invited several surgeons, obstetricians and pediatricians personally, they never finished committing, and we think that one of the main reasons is because

something similar has never been done in our country and it is something unknown if you will. In such a way that this will continue to be the main challenge that we must face for some time, until this type of training becomes routine. In the meantime, we will continue to knock on their doors tirelessly, until change occurs.

Future directions

Now that this first course has been formally completed in Venezuela, we think that the route that should be followed is to continue insisting on inviting people from other specialties and nurses to these courses, so we can give a greater educational meaning to these experiences, since it will allow us to put into practice what we have learned and thus promote a better performance of the perioperative care teams, with the consequent improvements in patient safety and in final outcomes.

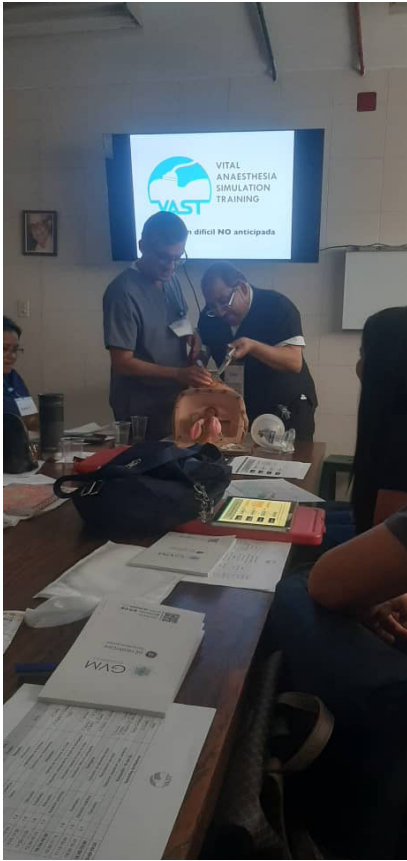
As a next step, we think that we should organize the next 2-3 courses in cities where we have a greater certainty of being able to meet this objective, either through a group of anesthesiologists who are involved in postgraduate teaching and can achieve the cooperation of their peers from postgraduate programs in other specialties, or also by organizing it in Caracas, city where the 5 members of the VAST team live and work, which will allow us to better convene the different actors of the perioperative care teams.

After having run these 2-3 additional courses and having observed and selected potential candidates to become facilitators, we should organize a first facilitator course that includes people from various geographical regions, in such a way as to facilitate the gradual dissemination of the VAST program in the country, reducing the costs of having to move all the facilitators from another city. with the costs of travel and accommodation that greatly impact the overall budget of the course.

Course photos







2 days program

Curso VAST – Día I					
Hora	Código	Formato	Sesión	Gr A	Gr B
11:00-11:15			Registro		
11:15-11:30	1.1	Discusión	Introducción	JC Duarte	
11:30-12:20	1.2	Estación práctica	Habilidades no técnicas	JC Duarte / D. Carrasquel	
12:20-12:50	1.3	Demo	Escenario por facilitadores	Todos	
12:50-13:30			Almuerzo		
13:30-14:05	1.4	Discusión	Manejo de Recursos en Crisis	D. Sánchez	
14:05-14:50	1.5	Escenario	Evaluación preoperatoria cirugía de emergencia	D. Sánchez / N. Bracho	D. Carrasquel / JC Duarte
14:50-15:30	1.6	Discusión	Discusión basada en caso de dolor	JC Duarte	
15:30-16:15	1.7	Estación práctica	Intubación difícil no anticipada	N. Bracho / D. Sánchez	
16:15-16:30			Refrigerio		
16:30-17:15	1.8	Escenario	Inducción de secuencia rápida	D. Sánchez / N. Bracho	D. Carrasquel / JC Duarte
17:15-18:00	1.9	Estación práctica	Resucitación neonatal	N. Bracho / D. Sánchez	
18:00-18:45	2.1	Discusión	Discusión basada en caso obstétrico	Diego Carrasquel	
18:45-19:00			Evaluación - fin del día	JC Duarte	
19:00-19:30			Debriefing facilitadores	Todos	

Curso VAST - Día 2					
Tiempo	Código	Formato	Sesión	Gr A	Gr B
07:30-7:45			Reflexión del día 1	D. Carrasquel	
07:45-08:30	2.2	Escenario	Evaluación preoperatoria obstétrica	D. Sánchez / JC Duarte	D. Carrasquel / N. Bracho
08:30-09:15	2.3	Escenario	Cesárea bajo anestesia espinal	D. Sánchez / JC Duarte	D. Carrasquel / N. Bracho
09:15-10:00	2.4	Escenario	Inducción de anestesia general para cesárea	D. Sánchez / JC Duarte	D. Carrasquel / N. Bracho
10:00-10:15			Refrigerio		
10:15-11:00	2.5	Escenario	Hemorragia intra-parto en hospitalización	D. Carrasquel / JC Duarte	D. Sánchez / N. Bracho
11:00-11:45	2.6	Escenario	Hemorragia post-parto en recuperación	D. Carrasquel / JC Duarte	D. Sánchez / N. Bracho
11:45-12:30	2.7	Escenario	Sepsis Post-operatoria	D. Carrasquel/ JC Duarte	D. Sánchez / N. Bracho
12:30-13:15			Almuerzo		
13:15-13:45	2.8	Discusión	Burnout	D. Sánchez	
13:45-14:25	3.1	Discusión	Discusión basada en caso de pediatría	D. Carrasquel	
14:25-15:10	3.2	Escenario	Evaluación pediátrica preoperatoria	N. Bracho / JC Duarte	D. Sánchez / D. Carrasquel
15:10-15:50	3.3	Escenario	Laringoespasma post-extubación pediátrica	N. Bracho / JC Duarte	D. Sánchez / D. Carrasquel
15:50-16:00			Refrigerio		
16:00-16:20	3.4	Discusión	Evaluación primaria en trauma	N. Bracho	
16:20-17:05	3.5	Escenario	Trauma – quemaduras pediátricas	D. Carrasquel / JC Duarte	D. Sánchez / N. Bracho
17:05-17:50	3.6	Escenario	Trauma – accidente automovilístico	D. Carrasquel / JC Duarte	D. Sánchez / N. Bracho
17:50-18:35	3.7	Escenario	Trauma - Reevaluación	D. Carrasquel / JC Duarte	D. Sánchez / N. Bracho
18:35-18:45	3.8	Discusión	Acciones por tomar	JC Duarte	
18:45-19:00	3.9	Reflexión	Compromiso de cambio	Todos	
19:00-19:15			Evaluación final y entrega de certificados	Todos	
19:15-20:00			Debriefing de facilitadores + empacar materiales	Todos	