



VITAL ANAESTHESIA SIMULATION TRAINING

VAST Facilitator and VAST Wellbeing Courses

Anesthesia & Critical Care Simulation Laboratory

MUHAS, Dar es Salaam, Tanzania

Feb 27th to March 2, 2023

Dr. Karima Khalid (Course Director) Dr. Salehe Mrutu (FY coordinator)



Executive summary

Situation

Vital Anaesthesia Simulation Training (VAST) Facilitator Course VAST Wellbeing was reintroduced at the Muhimbili University of Health and Allied Sciences (MUHAS) in Dar es Salaam, Tanzania by Dr. Karima. This was to create a cohort of trainers to start running the Foundation Year (FY) that was requested by Dr. Salehe. In addition, VAST Wellbeing was introduced.

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. In March 2020, in-person course delivery was put on hold due to Covid and in September 2022, VAST courses were held in Rwanda to re-initiate training. This was the second time that VAST was offered in Tanzania under the WFSA, and SATA support, Laerdal Foundation funding and VAST leadership.

Assessment

Both courses were received with great enthusiasm and a desire for more training and practice. A multidisciplinary participant group was successfully recruited, which led to interesting discussions during debriefing. A total of 10 facilitators and 1 observer were trained in the Facilitator Course (FC) and 19 participants were trained in the VAST Wellbeing (VW) course. This cohort of facilitators, will aid in the establishment of VAST Foundation Year (FY) at MUHAS.

Recommendations

The course proved to be highly beneficial for our facilitators, providing them with valuable practical experience and establishing a strong foundation for the upcoming VAST FY. The MUHAS FY coordinator was inspired to capitalize on the gained momentum and initiate the FY at the earliest opportunity. Participants were encouraged to apply their enhanced debriefing skills with their trainees and within their respective workplaces. Furthermore, VW was recognized as a crucial resource that participants could bring to their workplaces, raising awareness and promoting its significance.

Contents

Acknowledgements	4
Attendees	4
Venue and equipment	5
VAST Wellbeing Course	5
VAST Facilitator Course	6
Simulation coordinator training	6
Social life	6
Course evaluations and informal feedback	7
Challenges and lessons learnt	9
Recommendations	10
Course photos	11

Acknowledgements

We gratefully acknowledge:

- The Laerdal foundation for course funding
- The WFSA for organizational support and project management
- The Royal College of Physicians and Surgeons of Canada for course funding
- SATA and the Tanzanian facilitators for their voluntarism and enthusiasm
- The enthusiasm and support of our international volunteer network

Attendees

VAST Facilitator Course: February 28, Mar 1, 2, 2023				
Last Name	First Name	Professional Role	Hospital	Course role
Abdallah	Atala	Resident anaesthesia	MUHAS	Participant
Abdul	Ally	Midwife	MUHAS	Participant
Karuma	Asha	Nurse Anaesthetist Trainee	MOI	Sim Coordinator Trainee
Lemnge	Anna	Anaesthesiologist	MOI	Participant
Mrutu	Salehe	Anaesthesiologist	MUHAS	Participant/Organizer
Msanga	Hassani	Anaesthesiologist	MUHAS	Participant
Oyugi	Raymond	Anaesthesiologist	MNH	Participant
Tupa	Merina	Tutorial assistant anaesthesia	MUHAS	Participant
William	Astone	Nurse anaesthetist (student)	MOI	Participant
Mwampashi	Benedicto	Resident anaesthesia	MUHAS	Participant
Lugazia	Edwin	Anaesthesiologist (Chief)	MUHAS	Observer
Kikula	Amani	Obs/gyn	MUHAS	Did not attend
Lukansola	Lukansola	Anaesthesiologist	MUHAS	Did not attend
Misidai	Mungeni	Surgeon	MUHAS	Did not attend
Mwasapi	Paul	Anaesthesiologist	MUHAS	Did not attend

VAST Wellbeing: February 27, 2023				
Last Name	First Name	Professional Role	Hospital	Course role
Abdallah	Atala	Resident anaesthesia	MUHAS	Participant
Abdul	Ally	Midwife	MUHAS	Participant
Amani	Felix	Anes Resident	MUHAS	Participant
Chande	Hamida	Anes Resident	MUHAS	Participant
Chilale	Mboni	Anes Resident	MUHAS	Participant
Karuma	Asha	Nurse Anaesthetist	MOI	Participant
Kikula	Amani	OB GYN	MUHAS	Participant
Lemnge	Anna	Anaesthesiologist	MOI	Participant
Lugazia	Edwin	Anaesthesiologist (Chief)	MUHAS	Participant
Misidai	Mungeni	Surgeon	MUHAS	Participant
Mohamed	Rashid	Anes Resident	TKBORA RRH	Participant

Mrutu	Salehe	Anaesthesiologist	MUHAS	Participant
Mryma	Hadia	Anes Resident	MUHAS	Participant
Msanga	Hassani	Anaesthesiologist	MUHAS	Participant
Mwampashi	Benedicto	Resident anaesthesia	MUHAS	Participant
Oyugi	Raymond	Anaesthesiologist	MNH	Participant
Salim	Sheidai	Anes Resident	MUHAS	Participant
Tupa	Merina	Tutorial assistant anaesthesia	MUHAS	Participant
William	Astone	Nurse anaesthetist (student)	MOI	Participant
Faculty: February 27 - Mar 2, 2023				
Last Name	First Name	Professional Role	Country	Course role
Khalid	Karima	Anaesthesiologist	Tanzania	Course director
Zakaria	Naima	Anaesthesiologist	Tanzania	Facilitator
Zacharia	Amos	Anaesthesiologist	Tanzania	Facilitator
Saria	Peter	Anaesthesiologist	Tanzania	Facilitator
Saddington	Francesca	Anaesthesiologist	UK	Facilitator
Ellis	Ryan	Anaesthesiologist	Uganda	Facilitator
Lubis	Nur	Anaesthesiologist	Australia	Facilitator
Whynot	Sara	Simulation coordinator	Canada	Co-ordinator

Venue and equipment

Venue

The courses were held in the Gradian Anesthesia & Critical Care Simulation Laboratory in MUHAS, Dar es Salaam, Tanzania. The courses utilized the two simulation rooms and 2 lecture rooms, one of which was used as the debriefing room. This is a fully functional simulation centre with 2 established simulation spaces with behind-the-glass observation capabilities.

Equipment

All equipment was provided by the ACCSL at MUHAS.

VAST Wellbeing

This was the first wellbeing course run in Tanzania. The participants displayed great enthusiasm and a willingness to openly share and engage in discussions. Historically, mental health and overall well-being have remained subjects avoided in open conversations. Hence, the platform created for discussing these matters openly was met with significant gratitude. Attendees generated excellent ideas for enhancing their individual and workplace well-being. The tools provided throughout the course were regarded as pragmatic and feasible, resulting in a highly positive reception.

VAST Facilitator Course

Preparation

This was the second time VAST was run at MUHAS, therefore, all equipment was already in-house except for a few disposables. These were provided by the Canadian instructor. In addition, SLACK channel was created in December 2022 to facilitate communication between the facilitators and enable effective planning regarding course participant lists for the learning platform, travel/logistics and provided an effective means to share documents relevant to the courses.

The FC utilized only a single simulation due to low participant numbers (n=8). The decision was made to run the same scenarios for each group as there were not sufficient numbers for all role assignments plus scenario facilitation. This worked extremely well for our group which included novices, as each group felt a bit less confused being able to observe the other group run the same scenario. This demonstrates that there is flexibility in course delivery, in context, without compromising the learning outcomes for each participant.

Facilitation and debriefing practice

The bulk of the course involved practice of the four elements of VAST scenario facilitation: briefing, iPads/prompts, debriefing, and co-facilitation. In addition, the FC was delivered over three days enabling everyone to have the opportunity for practicing each role at least twice. FC participants were paired with experienced facilitators for leading, running the iPads and making observations for the debriefing. In addition, the decision was made to provide more practice leading debriefing as participants struggle with this the most. Therefore, Debriefing Conversation Starters was substituted in place of Implementation Planning on Day 3. Again, this demonstrates flexibility without compromising learning outcomes. We found that the 3-day FC course was very beneficial as it provided ample time for all components of the course.

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 3-day format was very conducive to the full development of 2 scenarios, and successful execution of each, including the debrief.

Simulation coordinator training

Sara Whynot trained Asha Karuma, a very experienced nurse anesthetist. She performed with skill and her familiarity with simulation will be an asset in the delivery of future courses.

Social life

The group of participants, including the international and local faculty were collegial, lively, and engaged. The faculty, international and local, adventured out nightly in search of food, street activity and ice cream. We were fortunate that Naima grew up on the very streets close to MUHAS. We thoroughly enjoyed our time in Dar, and together, as this

leisure time was essential to offset the intensity of each day of instructional time. We laughed a lot.

Course evaluations and informal feedback

VAST Wellbeing Course Feedback

[synopsis of comments]

What went well

- Thank you for the course. I needed it for my well being.
- Supportive and teamwork spirit are Vital not only in VAST but in day to day life process

Challenges / Improvements

- Giving more room to share individual responses and therefor learning more
- More time for the course to allow reflection and sharing experiences.
- Psychological, economical, and socially

Take home messages (from participants)

- Our wellbeing is crucial for our health and those around us.
- inexpensive and practical things can be done in our settings to prevent burn out.
- each one of us has a role to play.
- Burn out is multidimensional.
- it is not expensive to prevent burnout.
- verbal encouragement can be highly effective in maintaining wellbeing.
- Wellbeing is determined by both physical and mental health.
- Sharing ideas with people and exchanging ideas also promotes wellbeing.
- Wellbeing has multifactorial root causes, so when dealing with wellbeing an individual should be considered as a "whole", holistic approach to care should be considered.

Recommendations

- We had time limitation and we ran the half day course. From the feedback received, running a full day course will be more beneficial as it will give participants more time to engage and share experiences and recommendations.
- Running wellbeing courses regularly in our workplaces will improve work-life balance and increase productivity

Action items

- Coordinate with the new facilitators and plan wellbeing courses at MUHAS and in the participants workplaces.

VAST Facilitator Course feedback

[synopsis of comments]

What went well

- The class sessions were so engaging. It helped us to be active, get the points and enjoy the lessons.
- The use of videos in the lectures was an excellent idea.
- thanks for such an interesting session.
- I felt empowered with the knowledge and skills.
- none, everything was great.
- The day was exciting, interactive, and well organized.
- big up to the team and facilitators
- The day was fantastic, and I managed to attain all of my day 1 objectives.
- Well done welcoming and warmth which opens up the togetherness and team spirit.
- thanks for the opportunity.
- The instructors were very engaging and helpful in all aspects.
- The day 2 was very cooperative and attracting.
- Mentorship and Supportive supervision from our facilitators really encourage learning.

Challenges / Improvements

- I think we need more practice on debriefing. I believe the more scenarios we perform; our skills will get better.
- logistics: we started a bit late, but training went well.
- By splitting trainees into smaller groups for better practice
- Most of the scenarios have been focused on the management of anesthesia complications. If possible, could a mixture of cases from different professionals
- Supportive supervision in VAST activities till we will be able to navigate the slack and VAST materials.
- More time for practicing the simulation scenario
- More and more workshop so as to BOLD the knowledge and skills acquired for betterment experience.

Take home messages (from participants)

- When setting up a scenario, you must have few objectives and try as much as possible to meet them.
- The objectives should be SMART(Specific, Measurable, Attainable, Realistic and Time bound)
- In debriefing you should use advocacy inquiry with good judgement.
- burnout can be prevented.it is very important to take care of our wellbeing so as to be more productive
- Having a systematic framework during debriefing is key to delivering an effective debrief and engaging the participant.
- The key to running an effective scenario requires a lot of background planning and preparation.
- Understanding the participant framework (assumptions, values, and norms) is key towards impact behavioral changes.
- Debriefing is an important part of simulation.

- running the scenario is a challenging task and you have to read it and understand it before running it
- Focus of the training is more of Learner-centred rather than facilitator-centered.
- The importance of using the debriefing framework during simulation-based education.
- How to use the pre-briefing checklist
- Team work spirit is vital in simulation setting and day to day activities

Recommendations

- Repeating the same scenario for both groups in the practice sessions. This helped the participants concentrate on running the scenario and de-briefing rather than trying to learn the scenario content. The groups learnt from each other.
- Having some phrases to help the participants start a de-brief off, especially for those whose first language isn't English
- An additional session was introduced, involving small groups, to practice debriefing through the utilization of concise vignettes.
- Adaptation of the course to run over 3 days allowed participants ample time for scenario execution and debrief practice. This adaptation was particularly useful in LMIC context, where participants may not have encountered the same extent of simulation training as their counterparts in high-income countries, resulting in less prior experience.
- 3 days course allowed more time for scenario teaching, which takes time especially for those new to scenario teaching
- Adaptation of scenarios so they are specific to the environment in which the participants are working in.

Action items

- Start organizing the FY course.
- Further VAST FC courses to get enough facilitators to ensure smooth running of the FY course.
- Organize VAST courses in different regions of the country

Enablers, Challenges and Lessons learned

Enablers

Most participants had previous simulation experience.

Participant and faculty were familiar with each other.

Minimal hierarchy which allowed open communication.

Adequate space which allowed several activities to run simultaneously.

Experienced facilitators who engaged well with the junior facilitators.

The blend of local and international faculty ensured a seamless running of the course that took local context into consideration.

Challenges

Last minute cancellation of participants who are senior faculty members.

Lessons Learned

Avoiding involvement of senior faculty members who could potentially be called away for unforeseen urgent commitments.

Balancing flexibility while maintaining the course objectives and content is of ultimate importance.

Recommendations

1. Three-day courses when possible as it gives more time for participants to practice skills, in particular debriefing.
2. The LMS system should provide a way for facilitators to provide their feedback, in addition to participants.
3. Specifically, regarding the 3-day FC format, it would be beneficial if the LMS system was updated so participants can leave feedback on day 3. Currently, we only 2 days of participant feedback available.
4. Day 3 agenda: suggest substituting, as we did, “Debriefing Conversation Starters” in place of the first session: Implementation Planning.

Course Photos











