



VITAL ANAESTHESIA SIMULATION TRAINING

VAST Wellbeing, VAST Facilitator Course and VAST Course

*Patty Livingston, Brendan Morgan, Stew Forbes & Ravi Ram Shrestha
Kathmandu, Nepal, November 2023*



Executive summary

Situation

VAST Wellbeing, a VAST Facilitator Course and a VAST Course were successfully offered in Kathmandu, Nepal.

Background

Dr Ravi Ram Shrestha, the Academic Head of Anesthesia at Bir Hospital in Kathmandu had previous experience with the SAFE Obstetric Course and simulation training. He was keen to include more simulation-based education for his anesthesia trainees and learned about VAST from the World Federation of Societies of Anaesthesiologists (WFSA) website. Dr Ravi reached out to VAST to request introduction of the full spectrum of VAST's courses to Nepal. Dr Ravi and Dr Patty were successful in receiving a WFSA small projects grant to support training in Nepal.

Assessment

The three courses were well received and there is a desire to continue with VAST in Nepal.

Recommendations

1. Implement the VAST Foundation Year starting in January 2024.
2. Offer an abbreviated VAST Course in March 2024.
3. Aspire to repeat a VAST Course within six months.
4. Collaborate with Indian VAST Instructors to deliver a VAST Facilitator Course.

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Acknowledgements

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- World Federation of Societies of Anaesthesiologists (WFSA)
- Bir Hospital, Kathmandu, Nepal
- Royal College of Physicians and Surgeons of Canada
- Curtin University, Perth, Australia
- Department of Anesthesia, Pain Management and Perioperative Medicine, Dalhousie University, Canada

Attendees

VAST Wellbeing – 20 November 2023			
Name	Professional role	Course role	Workplace
Patty Livingston	Anesthesiologist	Instructor/ Course director	Dalhousie University, Canada
Ravi Ram Shrestha	Anesthesiologist	Local course director/ VW participant	Bir Hospital, Kathmandu
Brendan Morgan	Anesthesiologist	Instructor	Dalhousie University, Canada
Sailaja Kamabathula	Anesthesiologist	Instructor	Hyderabad, India
Stewart Forbes	Anesthesiologist	Instructor	Dalhousie University, Canada
Vibhavari Naik	Anesthesiologist	Instructor	Hyderabad, India
Sara Whynot	Research coordinator	Simulation coordinator	Dalhousie University, Canada
Santosh Behele	Simulation coordinator	Sim coordinator trainee	Bir Hospital, Kathmandu
Mina Thapa	Simulation coordinator	Sim coordinator trainee	Bir Hospital, Kathmandu
Ritu Pradhan	Anesthesiologist	Participant	Bir Hospital, Kathmandu
Pradip Raj Vaidya	Anesthesiologist	Participant	Bir Hospital, Kathmandu
Bidur Kumar Baral	Anesthesiologist	Participant	Bir Hospital, Kathmandu
Anuj Jung Karki	Anesthesiologist	Participant	Bir Hospital, Kathmandu
Shubhash Regmi	Anesthesiologist	Participant	Bir Hospital, Kathmandu
Puspa Raj Poudel	Anesthesiologist	Participant	Bir Hospital, Kathmandu
Ujma Shrestha	Anesthesiologist	Participant	Kathmandu Medical College
Valancy Cole	Anesthesia trainee	Participant	Dalhousie University, Canada
Niranjana Bhandari	Critical care nurse	Participant	Bir Hospital, Kathmandu
Indra Laxmi Shrestha	Critical care nurse	Participant	Bir Hospital, Kathmandu
Dikshya Tamang	Critical care nurse	Participant	Bir Hospital, Kathmandu
Shreechala Pariyar	Critical care nurse	Participant	Bir Hospital, Kathmandu
Neebha Prajapati	Critical care nurse	Participant	Bir Hospital, Kathmandu
Bhawana Ghimire	Critical care nurse	Participant	Bir Hospital, Kathmandu
Ramilia Joshi	Critical care nurse	Participant	Bir Hospital, Kathmandu
Bijaya Dawadi	Critical care nurse	Participant	Bir Hospital, Kathmandu
Sakina Dong Tamang	Critical care nurse	Participant	Bir Hospital, Kathmandu
Geeta Basu	Critical care nurse	Participant	Bir Hospital, Kathmandu
Sunita Singh	Critical care nurse	Participant	Bir Hospital, Kathmandu
Sarawoti Pudasani	Critical care nurse	Participant	Bir Hospital, Kathmandu

VAST Facilitator Course – 21-23 November 2023			
Name	Professional role	Course role	Workplace
Patty Livingston	Anesthesiologist	Instructor/ Course director	Dalhousie University, Canada
Ravi Ram Shrestha	Anesthesiologist	Local course director/ FC participant	Bir Hospital, Kathmandu
Brendan Morgan	Anesthesiologist	Instructor	Dalhousie University, Canada
Sailaja Kamabathula	Anesthesiologist	Instructor	Hyderabad, India
Stewart Forbes	Anesthesiologist	Instructor	Dalhousie University, Canada
Vibhavari Naik	Anesthesiologist	Instructor	Hyderabad, India
Sara Whynot	Research coordinator	Simulation coordinator	Dalhousie University, Canada
Santosh Behele	Simulation coordinator	Sim coordinator trainee	Bir Hospital, Kathmandu
Mina Thapa	Simulation coordinator	Sim coordinator trainee	Bir Hospital, Kathmandu
Ritu Pradhan	Anesthesiologist	Participant	Bir Hospital, Kathmandu
Pradip Raj Vaidya	Anesthesiologist	Participant	Bir Hospital, Kathmandu
Bidur Kumar Baral	Anesthesiologist	Participant	Bir Hospital, Kathmandu
Anuj Jung Karki	Anesthesiologist	Participant	Bir Hospital, Kathmandu
Shubhash Regmi	Anesthesiologist	Participant	Bir Hospital, Kathmandu
Puspa Raj Paudel	Anesthesiologist	Participant	Bir Hospital, Kathmandu
Ujma Shrestha	Anesthesiologist	Participant	Kathmandu Medical College
Hemant Adhikari	Anesthesiologist	Participant	Mediciti Hospital, Lalitpur
Valancy Cole	Anesthesia trainee	Participant	Dalhousie University, Canada

VAST Course – 26-28 November 2023			
Name	Professional role	Course role	Workplace
Patty Livingston	Anesthesiologist	Instructor/ Course director	Dalhousie University, Canada
Ravi Ram Shrestha	Anesthesiologist	Local course director/ trainee facilitator	Bir Hospital, Kathmandu
Brendan Morgan	Anesthesiologist	Instructor	Dalhousie University, Canada
Stewart Forbes	Anesthesiologist	Instructor	Dalhousie University, Canada
Sara Whynot	Research coordinator	Simulation coordinator	Dalhousie University, Canada
Santosh Behele	Simulation coordinator	Sim coordinator trainee	Bir Hospital, Kathmandu
Mina Thapa	Simulation coordinator	Sim coordinator trainee	Bir Hospital, Kathmandu
Puspa Raj Paudel	Anesthesiologist	Trainee facilitator	Bir Hospital, Kathmandu
Pradip Raj Vaidya	Anesthesiologist	Trainee facilitator	Bir Hospital, Kathmandu
Bidur Kumar Baral	Anesthesiologist	Trainee facilitator	Bir Hospital, Kathmandu

Anuj Jung Karki	Anesthesiologist	Trainee facilitator	Bir Hospital, Kathmandu
Shubhash Regmi	Anesthesiologist	Trainee facilitator	Bir Hospital, Kathmandu
Ujma Shrestha	Anesthesiologist	Trainee facilitator	Kathmandu Medical College
Hemant Adhikari	Anesthesiologist	Trainee facilitator	Mediciti Hospital, Lalitpur
Valancy Cole	Anesthesia trainee	Trainee facilitator	Dalhousie University, Canada
Abhishekh Mager	Anesthesia trainee	Participant	Bir Hospital, Kathmandu
Alish Mishra	Anesthesia trainee	Participant	Bir Hospital, Kathmandu
Bikesh Suwal	Anesthesia trainee	Participant	Bir Hospital, Kathmandu
Bipin Raman Parajuli	Anesthesia trainee	Participant	Bir Hospital, Kathmandu
Binisha Gongal	Anesthesia trainee	Participant	Bir Hospital, Kathmandu
Abhinash Saptoka	Anesthesia trainee	Participant	Bir Hospital, Kathmandu
Ankit Poudel	Anesthesia trainee	Participant	Bir Hospital, Kathmandu
Ashru Neupane	Anesthesia trainee	Participant	Bir Hospital, Kathmandu
Binita Gautam	Anesthesia trainee	Participant	Bir Hospital, Kathmandu
Kaushal Samsher Thapa	Surgical trainee	Participant	Bir Hospital, Kathmandu
Bijay Raj Bhatta	Surgical trainee	Participant	Bir Hospital, Kathmandu
Junu Thapa	Anesthesia assistant	Participant	Bir Hospital, Kathmandu
Bina Musyako	Anesthesia assistant	Participant	Bir Hospital, Kathmandu
Renu Rai	Nurse	Participant	Bir Hospital, Kathmandu
Kriti Guragain	Nurse	Participant	Bir Hospital, Kathmandu

Venue and equipment

The courses were held in the National Simulation Laboratory, Bir Hospital, Kathmandu, Nepal. The simulation centre has been open for about a year. It is spacious with a large lecture theatre, a small lecture theater, two simulation stations and two debriefing rooms. The simulation coordinators, Santosh and Mina, had capably assembled the required simulation equipment. Two iPads were purchased by VAST and donated to the centre. The other two iPads were loaned for the course.

It should be noted that Santosh did a fabulous job with all the technology and took many photographs for the course.

VAST Wellbeing

VAST Wellbeing is a one-day course designed to give inter-professional healthcare providers skills for recognizing and preventing burnout and for promoting personal and professional wellbeing. Participants in this training were anesthesiologists and critical care nurses. The course was generally well received, and engagement was good, but our team noted some struggle with the concept of “values” and think some revisions to the presentation and exercises for “Health Habits” could be helpful. Specifically, it may worth redirecting the focus to tangible habits that people would like to change.

The mindfulness exercises went well. Participants identified that mindfulness and meditation are practices that are known to them. We conducted these exercises by having the two Indian facilitators read the instructions aloud, rather than by using the audio-recordings, with the

intention that the accents would be more familiar. We chose to omit the exercise on mindful handwashing as the exercise is less authentic with hand sanitizer. Rather, we described the technique of mindful handwashing.

Interestingly, the concept of “self-compassion” did not translate well to the Nepalese context where the tendency is more to excuse oneself and blame others.

VAST Facilitator Course

The VAST Facilitator Course (FC) is designed to teach people how to design, run, and debrief VAST simulation scenarios. Since this course was the first experience with VAST in Nepal, we chose to run a 3-FC. Training continued during the VAST Course where the trainee facilitators were mentored in conducting and debriefing the sessions. This post-FC training is considered essential for consolidating new skills.

During the FC, the VAST Facilitation Observation and Rating Method (the VAST FORM) was piloted for the first time. The VAST FORM was designed to improve the quality of learning conversations during meta-debriefing of facilitator trainees. It has five parts: 1. Checklist: a cognitive aid for facilitating and debriefing, 2. Timing – a chart for recording the time used during various stages of facilitation, 3. Flow – a conversational communication tool used to identify patterns of communication during debriefing, 4. Behaviour – 32 competencies related to techniques, artistry, and values of simulation facilitators, and 5. Rating – a global rating scale of facilitators to be used only by experts.

During the FC, we informally trialed the first four parts of the VAST FORM. There is no doubt the checklist was extremely helpful for course participants as they learn the steps of VAST facilitation. It was also useful for meta-debriefers to record observations. The Timing chart was useful to record how time was spent as the course progressed. Early on, the scenario preparation could take 15-20 minutes. With more practice, this became more efficient. Recording the timing does deter from making other observations on performance, so it is not useful for novices. It could be used periodically to record progress during a course by an expert not engaged in another role. Flow was interesting as it showed the communication patterns and highlighted the dominant and silent participants during debriefing. Again, this takes all the attention of the observer, so makes it hard to otherwise participate. Behaviour was the most challenging. During the FC, this section was reformatted to make it more like a checklist and this made the tool easier to use.

The instructors observed remarkable progress for the facilitator trainees from the start of the FC to the finish of the VAST Course. Advocacy-inquiry questions continue to be challenging but the group kept improving. We are pleased that course graduates will have the opportunity to apply these skills during the VAST Foundation Year, due to start in January.

The final day of the FC was curtailed due to a warning that a political protest would disrupt traffic and make it hard for people to return home.

VAST Course

The VAST Course was quite straightforward. We had a mixed group of anesthesia trainees, anesthesia assistants, nurses, and surgical trainees. Informal feedback was that people found the course beneficial.

VAST Foundation Year

The VAST Foundation Year is set to start in January 2024. All the Nepalese graduates of the FC are keen to be involved in running the VAST Foundation Year under the leadership of Dr Ravi Ram Shrestha. Dr Patty and Dr Ravi had a short discussion after all the training was over so that Dr Ravi would be familiar with the overall structure of the Foundation Year. The VAST administrators will be in touch with Dr Ravi to review further details of running the course and Dr Ravi will provide names of all facilitators and learners.

Simulation coordinator training

Sara trained Santosh and Mina, who quickly learned how to set up for VAST scenarios. They should be more than capable of supporting the VAST Foundation Year.

Social life

A delightful dinner was held at the Hotel Shanker on Day 2 of the VAST Facilitator Course. This was well attended and allowed FC instructors and participants to relax and enjoy each other's company. There was a two-day break between the FC and VAST Course, which we found essential.

Course evaluations and informal feedback

VAST Wellbeing

What participants enjoyed:

- Mindfulness exercises x 3; can apply mindfulness in daily life; useful for daily life and workplace x 2
- Healthy habits
- The initial concept was very new but as the session progressed, I enjoyed all aspects of this training; new topic
- Group discussions, interactivity x 6
- Thinking about the wellbeing of co-workers
- I enjoyed how this training made my mind calm and less worried about my problems; I enjoyed the training and learning how to make myself calm
- Learning about how to decrease burnout x 3; very good and very helpful for healthcare workers to overcome stress and prevent burnout
- Simplicity

- Well prepared and confident trainers
- Gratitude
- First of all, I want to thank the VAST team for the wonderful training. I enjoyed it a lot.

Areas for improvement:

- It was perfect
- Could be more interactive
- It's a good initiative
- No improvements; none x 2
- More meditation could be added
- All good x 3
- A bit of fast language x3
- From my point of view, every presenter was the best with a beautiful purpose

Key take away messages:

- I can take care of my state of mind
- Gratitude x 2
- SMART goals
- Change my previous attitude to today's models
- Assure personal wellbeing first
- Work mindfulness exercises into hectic schedules: mindfulness exercises x 5
- Breathing exercises
- Don't cling to stress, ventilate and seek help
- Recognize burnout and help yourself and someone around you; I will try to relieve burnout; overcoming burnout
- Identifying burnout in yourself or a colleague can improve the quality of life of yourself and those around you; supporting colleagues x 2
- For every problem there is a solution
- Make a community
- Give time for myself

Feedback for facilitators;

- Excellent x 2; thank you very much; nice; thank you for making the day so fruitful; very interactive x 2; use black and blue markers instead of green; it was so fruitful; they were great; great job!!!; thanks for providing information about burnout and a healthy lifestyle; everybody is so nice, love the voice modulation during presentation; it was good; facilitators are quite impressive; well prepared x 2; great classes; I would like to thank the facilitators, well explained

General comments;

- It was great to be part of the Wellbeing Course
- It was a good training
- I'm satisfied that this training fulfilled my objectives
- The course is mind blowing
- Overall exceeded expectations

- This training should be organized regularly to overcome burnout and help people's wellbeing x 3
- Thanks for being with us; thank you x 4
- I hope every healthcare worker should get the chance to learn this

VAST Facilitator Course

What participants enjoyed:

- Structured way of learning x 2
- Team working x 2
- Debriefing x 4
- Role play x 2
- Scenarios x 2
- Realistic
- Interactive
- Loved the game
- Everybody's involvement
- Focus on conducting scenarios rather than theoretical part
- Conducting scenarios we designed x 3
- Lots of practice

Areas for improvement:

- Participant course prior to FC
- Lengthy classroom lectures, especially post-lunch ones
- None; nothing; it's perfect
- If I had done the homework before, I would have done better
- Audio was not clear in debriefing video [maybe subtitles?]
- Less hectic schedule
- Time constraints, especially ANTS lecture

Key take away messages:

- Stick to the protocol x 3; stick to the scripts
- Debriefing technique x 3; debriefing is the core of simulation
- Structured method for facilitation x 3; conduct scenarios systematically x 2
- Use cognitive aids in a crisis x 3
- I will use debriefing skills and non-technical skills more in my daily practice x 2
- During debriefing, we can involve facilitators too, not just participants
- How to design scenarios x 2
- Advocacy inquiry questions
- ANTS

Feedback for facilitators:

- All facilitators are very motivated; it's good x 2; it's nice; could be more interactive; all were excellent x 2; thank you x 3; all were up to mark; they were very patient and energetic; very good; you people are amazing; great job and well done x 2

General comments:

- Nice training
- Needs more days
- Thank you so much for your great efforts x 2
- Food was good
- Nice and healthy environment
- Very informative and useful
- Thank you so much for making us the VAST trainers
- VAST is a very important course, would encourage others to take it, will incorporate into daily life

VAST Course

What participants enjoyed:

- Scenarios; simulation x 8; simulations and take home messages
- Group discussion x 2
- Videos
- Information was to the point
- Friendly trainers
- Plenty of free time
- Interactive x 2; engaging
- Good debriefing x 2
- Demonstration scenario
- Skills stations were engaging
- Slides were attractive
- May help my practice
- Realistic scenarios x 2
- Looking back from Day 1 to Day 3 makes me feel that we have achieved something

Areas for improvement

- A little more on systematic approach
- It was exhausting, maybe the number of simulations could be decreased
- Speak slowly
- It was perfect; nothing to improve
- Increase the days and decrease the time of the course

Key take away messages:

- Task delegation
- Closed loop communication x 5
- Communication skills x 4
- Leadership
- WHO SSCL x 2
- Handover with SBAR x 6
- AMPLE
- Crisis management
- Use of cognitive aids x 6
- Burnout

- Sharing mental model; vocalizing the problem x 3
- A to E approach
- Assertiveness
- Setting priorities; prioritization
- Reassessment
- The most important thing we lack is communication – be it closed loop, be it clear – thus my main take away from this training is communication

Feedback for facilitators:

- Thank you x 2; they were great !!!; good job; all were really good x 2; all of them were really engaging and provided wonderful debriefing sessions; excellent x 2; perfect training; need to focus on less active participants; all were encouraging and engaging, loved them all; they were really helpful; awesome; let the speaker talk openly rather than shutting them out; good job, keep doing it; thumbs up; they were attentive and good; with each passing day we could see some change and improvement in the facilitators as well.

General comments:

- Day 1 was wonderful
- Awesome; all is well
- I find the program very positive for my future practice
- Loved participating in the training
- Five stars out of five stars
- A little burnout from too many simulations
- Thank you for the effort
- Happy birthday Stew
- I am happy I got the opportunity to do this course
- Nice, excellent, insightful, active
- This program was great. Thank you so much team for all the efforts. I thought it made me feel I can see my patient as a human rather than material, as I think slowly we sink too much into mechanical work and forget the values that we have.
- It was an interesting course to be part of and I hope to have more such in the future.

Challenges and lessons learnt

1. Communication – there were more Slack channels created than needed. The FC participants generally prefer WhatsApp. A WhatsApp chat was created for this group. Slack is very good for communicating with the local course director. Clearer communication is needed in advance about how to use the LMS and how to find materials on the LMS.
2. Facilitator allocation sheets – course schedules and requirements keep changing. It is necessary to have facilitator allocations done for continuing professional development credits, but the original version is very unlikely to reflect the assignments used each day. It is helpful to have a few blank copies and even more helpful to have the capacity to print each day.

Recommendations and future plans

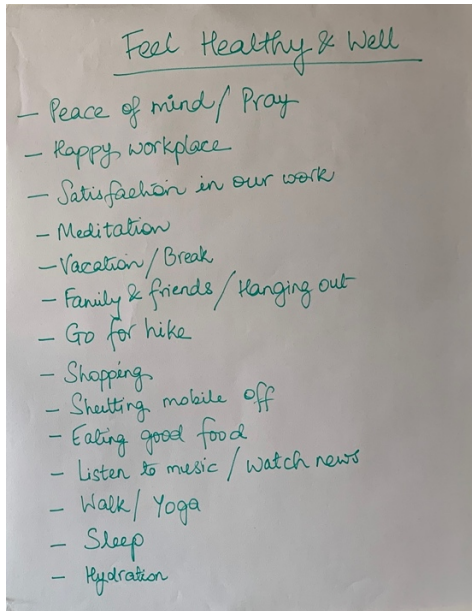
Future training in VAST at Bir Hospital is quite feasible. The simulation centre is well equipped, and both faculty and trainees have protected time for teaching so there are few obstacles to continuing VAST in Nepal. Some funds would be required for access to VAST Learning and for printing. It may be possible to charge some fees to recover costs.

1. Patty and Brendan to make a few revisions to the VAST Wellbeing PowerPoints, manual, and handbooks.
2. The VAST Foundation Year will start in January 2024 for the first-year residents at Bir Hospital. Most likely, Dr Ravi will double up sessions with the goal of being finished in about six months. Dr Ravi will be in touch with Dr Vai from Pune, India to get some practical tips on running the Foundation Year.
3. There is interest in running a one-day abbreviated VAST Course in a conjunction with the Society of Anesthesiologists of Nepal annual meeting to be held in late March 2024. Dr Patty has shared the one-day version of the VAST Course run in Honduras with Dr Ravi.
4. Dr Ravi plans to attend the World Congress of Anesthesiology meeting in Singapore in March 2024, so he will have the opportunity to meet with other VAST community members.
5. Dr Ravi would like to repeat the VAST Course within the next six months.
6. There is a desire to run a future VAST Facilitator Course but acknowledgement that this would require outside help, such as instructors from India.
7. There may be an opportunity for a couple of delegates from Nepal to attend the VAST SIMposium in Kenya in October 2024.

Course Photos



VAST Facilitator Course instructors and participants



VAST Wellbeing - what helps you feel well?



Dr Vibha



Scenario design exercise



Non-technical skills game



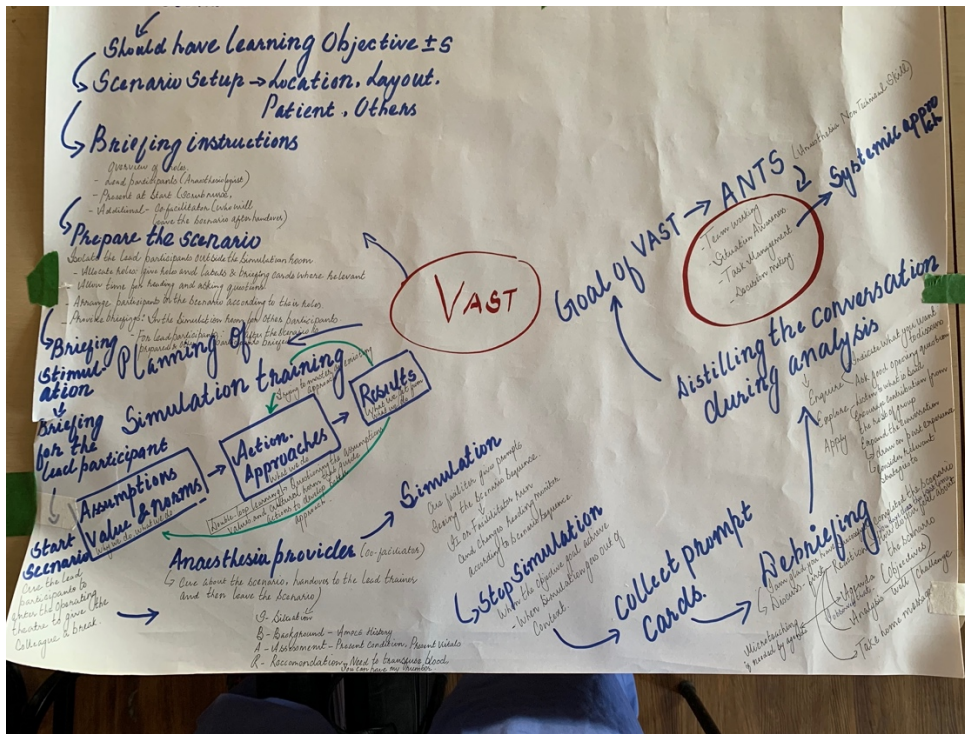
Scenario preparation



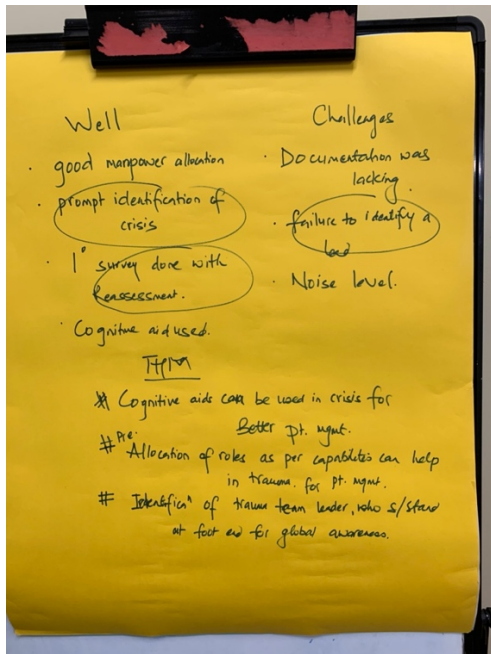
Scenario 3.2



Dr Ravi debriefing



Dr Pradip's comprehensive notes on VAST



Dr Hemant using cognitive aids



VAST Course instructors and participants

