VAST Course

Nyagatare, Rwanda 27-29 August 2018

Nyagatare is a small town in a remote corner of eastern Rwanda, north of Akagera Park, the savannah wildlife reserve. We had arrived at the venue (Nyagatare Diplomat Hotel) the afternoon prior to the course in two jam-packed cars with mannequins, our VAST bins (supplies) and the facilitation team, after driving 100 km of "African massage road" (bumpy and under construction). The massage road followed a somewhat shorter drive on the main highway to reach Rwamagana in the Eastern Province.

Because of geographical isolation, the health care challenges found in low-resource settings are compounded in this region. The VAST Course was designed to bring the benefits of active experiential simulation-based learning – mainstream for health care education in well-resourced settings – to health providers who work with limited resources, often in geographic isolation. Indeed, if the VAST Course can work in Nyagatare, if can probably work anywhere.

Dr. Christian, the Rwanda VAST Course Director, asked the regional hospital director generals to select 13 local anesthesia providers, nurses and midwives to attend this first of four VAST Courses we are currently offering. The facilitator team included Christian (Rwandan anesthesiologist), Eugene (senior Rwandan anesthesia resident), Laurence (Rwandan simulation centre coordinator), Sara (Canadian research facilitator), Dave (Australian anesthesiologist on a global health fellowship at Dalhousie University), Angela (Canadian anesthesiologist and global health leader) and myself, Patty (Canadian anesthesiologist and longtime friend of Rwanda).

The first morning got off to a rough start. A few participants had far to travel and lateness was compounded by rain. Despite our pleas to arrive on time, only one participant had appeared by the appointed start time. We had resigned ourselves to running the course regardless of how many participants showed up, but thankfully over the morning participants trickled in. By late morning, all 13 had arrived.

We quickly realized that language would be a far greater challenge than we had experienced during the pilot courses in Kigali. The Nyagatare participants speak Kinyarwanda and many have limited French or English. Simulation courses depend on communication, so clearly we had a problem. Fortunately, Christian, Eugene and Laurence were able to translate but due to the late arrival of many and substantial extra translation time, by lunch we were exhausted and running over an hour behind schedule. The whole notion of running this course seemed impossible.

Additional challenges had to do with noise. A shop across the street was playing loud music and there was a political campaign complete with megaphone blasting from the campaign truck. The combination of outside noise, language issues and the Rwandan tendency to speak softly was not a good mix.

Over lunch on day one, the faculty had an emergency meeting to figure out how to salvage a rapidly deteriorating situation. We decided to repeat the demonstration (faculty-led) scenario to model role-play in simulation. We adapted some of the discussions with slides to more role-play and demonstration. The Rwandan facilitators ran debriefings in Kinyarwanda or translated for those of us who spoke English. We

spoke slowly. The hotel manager asked the shop to turn down the volume and the political campaign move on. The participants began to engage in simulation and day one finished on a better note than it had started.

Christian spoke with the participants about punctuality and, happily, days two and three started on time with the full group. The participants became more comfortable with simulation, role-play and debriefing. The VAST Course emphasizes application of non-technical skills in common scenarios found in low-resource settings. We attempted to address content knowledge by using pathology frequent in this context, providing simple preparation reading and asking course participants to answer a set of questions before the course. During the course, key content for scenario performance is provided through interactive discussions before it arises in scenarios. For example, day two is all about obstetric anesthesia care and maternal emergencies. The day starts with group work to answer questions on the medical management of cases that arise the rest of the day in scenarios. We found it worked well for Eugene to use the prepared slides as a guide for himself but to run the case discussion with some demonstration (e.g. how to used left lateral tilt) and use of a flipchart to record answers to questions.

We continued in this way through days two and three with scenarios, demonstrations, translation and repeating scenarios when needed. Christian led the final course synthesis in Kinyarwanda, so it is difficult to report on what was said but he, Eugene and Laurence were convinced the participants had found the course valuable. One person said, "I am transformed". They asked for the course to be repeated often and to include more of their colleagues. Christian said the participants would leave the course as different people.

Feedback from the facilitator team:

- The course materials are great but sessions and teaching methods must be adapted to best meet the needs of the learners. This might mean following the PowerPoint discussion for one group and using the slides as a guide to demonstration for another.
- Flexibility is key. We needed to change the schedule to allow more focus on areas of weakness or to repeat scenarios as facilitator demonstrations when they had gone poorly.
- Language was our biggest challenge. Much more time is needed for a group with little English. This may require simplifying content to ensure the most essential points are understood. Eugene suggested future participants have a screening interview to assess their capacity in English.
- The course cannot fill knowledge gaps but some microteaching is necessary in debriefings. The focus should remain on non-technical skills.
- A poster of the ANTS framework with categories and elements would be helpful.
- Strive for a multidisciplinary group. People find it hard to role-play outside their normal roles. As much as possible, we asked people to play their normal roles but we had no surgeons, for example.
- Gather feedback on typos and unclear sections but don't do a massive re-write of the course manual for a year or two.

VAST Facilitator Course

CHUK Simulation and Skills Centre 30-31 August 2018

There was a last minute venue change from RMH to the CHUK sim centre. This proved to be an excellent venue for the facilitator course. The attendees were Francoise (staff anesthesiologist), Joseph, Alcade, Jean Paul (residents), Emmanuel (non-physician anesthetist), and Laurence and Viviane (sim centre coordinators). The group was a bit mixed, as some had attended VAST and others had not.

We ran the FC in a fairly relaxed way to be sensitive to the needs of the learners. Clearly, everyone wanted a lot of practice with all the components of running scenarios – pre-briefing, run sheets, iPad technology, making observations and debriefing. We realized the group needed a lot more practice than we could possibly give in two days. We did not have time to work on scenario design. We finished by inviting the FC trainees to be involved in future VAST Courses and highlighted that simulation facilitation is a journey that requires more practice.