Regional Anaesthesia in Africa

Learning can go both ways when you run international training programs, as a group of Perth specialists discovered in Ethiopia.

In September 2013, a team of regional anaesthesia enthusiasts from the Royal Perth Hospital embarked on an African adventure. Professor Kristina Boddu led the team, with the aim of taking ultrasound-guided regional anaesthesia (USGRA) to Addis Ababa, Ethiopia.

Professor Boddu had run five USGRA workshops in developing countries prior to this, and our anaesthesia department conducted the 35th and 36th biannual USGRA courses last year in Perth. We believe that the education, knowledge and opportunity to acquire these skills should be available to all anaesthesia practitioners. We believe education can enhance the safety of patient care in developing nations, while inspiring local anaesthetists and patient care in developing nations.

Our team also comprised Diana Davidson, a nurse anaesthesia practitioner from Pennsylvania who has been involved with Black Lion for many years, my anaesthesia consultants from the Royal Perth Hospital, Dr Matthew Haggett and Dr Adriano Calzolari, our regional nurse, Mrs Karolel Rolferson and resident medical officer Dr Shani Macaulay.

In Ethiopia we worked closely with the medical faculty of Addis Ababa University, based at Black Lion Hospital (Tikur Anbessa), the largest general public hospital in Addis. The dean, Dr Mahlet, and the head of the anaesthesia department, Dr Aku, welcomed us and provided support during our trip. We were privileged to tour their theatre complex and saw that as the training and primary government hospital for Addis Ababa, the Black Lion has a mix of high acuity and complex anaesthesia-surgical cases. We met the three trainee anaesthetists, who explained that most of the anaesthesia workload is handled by nurse anaesthetists. As specialist anaesthetists, their duties included overseeing a multitude of rooms and to run the highest risk theatres, such as thoracics.

Our course attracted around 60 participants from Black Lion Hospital, including anaesthetists, nurse anaesthetists, orthopaedic trainees, emergency department doctors, the professor of anatomy and his senior lecturer and an occasional neurosurgeon. A quick pre-workshop survey revealed most of the participants were using direct-vision or the ultrasound machine to teach the theory around transverse abdominal plane (TAP) blocks, and show how they could be performed using direct-vision or the ultrasound machine and probes available at the maternity hospital.

It was not all work, and under Mimi’s guidance we were introduced to jazz clubs, were moved to tears at the Red Terror Martyr’s Museum and stared in wonder at the wares for sale at Merkato markets, the largest open-air market in Africa. Our involvement in this outreach initiative proved a wonderful and enriching experience. Our Ethiopian colleagues had vast theoretical knowledge; most could quote textbooks and everyone was keen to learn about the technology available in anaesthesia and medicine.

Questions have been raised about the appropriateness of taking such a workshop, along with ultrasound equipment, to a country without access to the technology. I believe Dr Macaulay best expressed the sentiments of our team. “What we were doing is creating opportunity. Opportunity to challenge, to take those skills and build upon them over a lifetime. Furthermore, the workshop was more than just teaching ultrasound-guided nerve blocks. It was about educating the medical staff on pain and providing effective multimodal analgesia. The concept that pain leads to suffering and that this suffering does not have to be a mandatory part of the experience of being a ‘patient’.”

Our department is now planning the 11th USGRA course to be held in August. Our greater challenge, however, will be the following week when we take our course to Ortho One Orthopaedic Specialist Centre in Coimbatore, India. As we start planning these sometimes daunting ventures, it is imperative we reflect on what we have learnt:

1. Personally, learn as much from the workshop and stay in Addis Ababa. While we taught new skills and gave our colleagues a chance to feel, manipulate and handle new equipment, they left us with a deeper appreciation for our environment, an understanding of how privileged we are in the resources we have available, and a sense that the world is ever expanding. As educators, I believe it is our duty to stand on the precipice, extending a hand to help bring our fellow practitioners into the future with us.

2. Our lifeline was Wondwosen Goshu, a native Ethiopian nurse anaesthesia practitioner in Houston, Texas. Wondwosen and Professor Boddu had worked together at Memorial Hermann Hospital, University of Texas, Health Sciences at Houston, and it was his dream to bring educational opportunities to Ethiopia. Our second lifeline was Wondwosen’s cousin, Mimi, a local social anthropology student. Mimi spent countless hours translating Amheric (a semitic language spoken in Ethiopia), helped us navigate the cultural intricacies and showed us a beautiful and inspiring side of the city.

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It was wonderful to see the ingenuity and entrepreneurial spirit with which all obstacles can be overcome.