In October 2015 I volunteered as an anaesthetist at the University Teaching Hospital (UTH), the main referral hospital for all of Zambia, with 1,600 beds. After completing my Primary FRCA I took 6 months out of training and wanted to be productive with this time out. I had always wanted to practice anaesthesia in a developing country and thought this would be an ideal opportunity to do so. As I was a relatively junior trainee, I wanted to go with an organisation that had been established. A colleague had mentioned the Zambia Anaesthesia Development Project (ZADP). I researched this further and attended the MMed faculty day and met Dr. David Snell and Professor Kinnear who gave us details to the logistics of the programme. This sounded like a perfect opportunity to explore working in a developing country, getting involved with a large-scale audit project and teaching all within a short time frame.
I travelled to Lusaka in October 2015 for 6 weeks. My time was split between audit, teaching and theatres. I was involved with data collection looking at blood transfusions specifically triggers for transfusion, pre-operative Heamoglobin and patient’s details for all elective cases within UTH over a week period. I also looked at requested blood units ordered and concurrently distributed within the hospital and the outcomes of these units of blood. Whilst data collecting, it became apparent that at times there were no real triggers for transfusions. I transported some Heamacues from the UK which were donated to the anaesthetic department. Educating staff on the use of these Haemacues alongside the need for transfusion and transfusion triggers would hopefully reduce the unnecessary transfusion of patient undergoing elective surgeries.

I took part in the undergraduate training providing morning sessions covering topics such as teaching anaesthesia for aneurysm surgery and airway management. Once a week, formal sessions were given to the clinical officers using the developing world e-learning resource CD which gave a large number of interactive lectures without the need for internet connection. The clinical officers found these sessions extremely useful and I donated this CD to them with the hope of aiding self-directed learning. My lectures focused giving the basics of anaesthesia as they were at the start of their training.
Clinically I was able to gain a wide exposure to developing world anaesthesia. I was fortunate enough to see all the departments within UTH in my 6 week placement. I spent the majority of my time in the pediatric, obstetric and general theatres. With limited monitoring such as no end-tidal gas monitoring made me heighten my clinical skills, becoming more vigilant rather than relying on monitoring. It became apparent that patients undergoing elective procedures had varied pathology a lot more advanced than seen in the UK. Halothane, a volatile agent which up till now I had only read about, was the most abundant volatile gas within UTH. This meant when using halothane, communicating with team members earlier on as to ensure the patient would recover in a timely fashion due to its long onset and offset times. Equipment such as LMAs and ET tubes, which at home would be disposable items; would be cleaned, disinfected in large plastic bowels within theatres. This made me more meticulous at preparing and checking equipment that may be required as a contingency in an emergency situation.
The ICU was an area, which was very different to the experience I was used to. It challenged me to work in an environment with lack of drugs, equipment, medical staff and unreliable power and oxygen supply. One particular eye opening experience was a power failure just at handover which meant staffs were hand ventilating all patients requiring invasive ventilation for several hours. I was astounded at the solidarity amongst team members as anesthetists from theatres came quickly to help their colleagues on ITU to offer additional assistance.

Power failure in ITU and in pediatric theatres.

In the 6 weeks working at UTH, I have taken away many unforgettable experiences and hope to take the experience I’ve gained back to the UK to improve my practices. The data collection will provide an understanding to the current baseline of how blood is distributed within UTH. With time and education the hope is to improve efficiency by minimising wastage of blood and improve doctors understanding of transfusion triggers only transfusing when needed. I hope that the projects I have been involved in will go to show a simple intervention can make a big difference to patient care and improve efficiency of blood transfusions within UTH. This is a large-scale project and will take at least another year to complete. Clinically, I have learnt the importance of preparation, being vigilant and less reliant on monitoring and using clinical judgment. Thank you to everyone at UTH for being so welcoming and to AAGBI for the grant provided which contributed towards flights and accommodation.