In November 2013 I spent 6 weeks in Zambia working with the Zambia MMed anaesthesia programme. This programme was established 3 years ago and is currently training 21 Zambian doctors at University Teaching Hospital, Lusaka, via clinical supervision, teaching, supporting research and annual examinations. Zambia has a population of over 14 million, life expectancy is 54 years and government spending on health is 6.1% of GDP 1.

UTH is the main referral hospital for all of Zambia, has over 1800 beds and employs over 200 doctors and over 1,000 nurses 2. The anaesthetic department consists of 4 consultants (non-Zambian), 21 trainees, clinical officers, and at present Dr David Snell a UK consultant, and the ZADP ST6 trainee. There are 4 main theatre complexes covering paediatrics, obstetrics, general and emergency theatre, and a 10-bedded Intensive Care unit (ICU). There is a wide range of cases from paediatric neurosurgery to plastic surgery. ICU encompassed all patients requiring ventilation including children; presentations included severe sepsis, obstetric complications and head injuries.

My role was to support the existing programme via clinical supervision, teaching and exam revision whilst supporting any research or audit by the trainees. Over 6 weeks I divided my time between ICU and theatre.

There were a number of challenges facing development in ICU, but also a lot of improvements. Consultant led ward rounds were established in the few weeks before I arrived, bringing more structure and support to the trainees. We were continually challenged by lack of resources and limited nursing staff, despite being a 10-bedded unit; there were never more than 3 trained nurses at any one time. Sedation was a particular issue due to variable supply of propofol and only a handful of infusion pumps. For vasopressor support we had to rely on adrenaline or dopamine, and there was no availability for renal replacement therapy on the unit. I commenced a project to implement a Ventilator Associated Pneumonia (VAP) bundle for all ventilated patients that required regular mouthwash and antacid prescription; one of the barriers to implementation was availability of mouthwash (additional medications have to be purchased by patients’ family and chlorhexidine costs were around £8 per bottle). However I sourced a local alternative at £1 a bottle and sought authorization for purchase by the hospital. Following implementation we recorded reduction in mortality from 44% to 33%, with a significant reduction in VAP. Another issue in ICU was data collection. At the end of 6 weeks, there was
a computer installed in the unit and a database started that the trainees will use to record ongoing data on patient outcomes.

The most enjoyable aspect of my time was definitely in teaching and exam practice. Fresh from my Primary FRCA I organized MCQ quizzes and a mock OSCE session. The trainees performed well and I learned massively from being able to develop my teaching skills.

In summary, it was a privilege to support a fantastic programme making significant improvements in healthcare in Zambia. I gained excellent teaching experience and an insight into the challenges facing developing anaesthesia in a resource-poor environment. It is an excellent opportunity as an OOPE for junior trainees.

References