**Zambia Anaesthesia Development Programme – SETSA Report**

Dr. Palbha Jain

In August 2025, I spent six months working at the University Teaching Hospital (UTH) in Lusaka with the Zambia Anaesthesia Development Programme (ZADP). I had the privilege of working alongside some of the most dedicated and hardworking doctors I have ever met, who remained diligent and committed despite facing daily hurdles of limited resources, lack of infrastructure and poor pay. I was inspired to see how enthusiastically residents would seek out training opportunities despite the challenges of their working environment, passionate to improve the quality of care for the underprivileged mass local population of their country.

ZADP has been running since 2012 and typically has between 2-6 clinical fellows in-country at any one time. In a highly demanding environment where everyone is focused on ensuring safe delivery of care with high patient turnover, ZADP is dedicated specifically to advancing training and the anaesthesia specialty within Zambia. The placement involves working at UTH, the country's largest government referral centre, which has approximately 1,655 beds and is a key provider of specialist services including obstetrics, paediatrics, plastic surgery, neurosurgery and complex maxillofacial surgery. During this fellowship I also completed a Special Interest Area (SIA) module in Resource-Limited Anaesthesia which formed part of my UK anaesthesia training.

Over the six months, I worked in theatre 3-4 times a week, supporting trainees clinically by supervising anaesthesia delivery, refining techniques, and providing in-depth teaching on various subjects. I also used the skills I had learnt in my UK higher training to teach regional anaesthesia for awake surgery and management of both anticipated and unanticipated difficult airways.

The experience also provided me with valuable insight into delivering anaesthesia in a resource-limited environment. I learned how to navigate drug shortages, adapt to equipment failures and develop practical solutions to clinical challenges. I had to figure out how to maintain sterility when there was no running water, intubate challenging airways without muscle relaxation and deliver safe anaesthesia without capnography or depth of anaesthesia monitoring.

Outside of theatres, one of the most significant achievements of our team was restructuring the anaesthesia teaching programme, transforming it from a fully virtual, generalised program that ran in the evenings, to one that was tailor-made to year groups and embedded into daily work hours. Despite the challenges of scheduling, poor internet connectivity and limited culture of senior-led teaching and educational responsibility, we were able to create a program that involved the wider consultant cohort across Lusaka and shifted the model into one that was more local-led and sustainable. This required adapting to local working practices, identifying appropriate curriculum topics and encouraging engagement from both consultants

and residents. Ultimately, the success of this endeavour resulted in improved attendance, interactivity of the sessions and relevance to the residents.

Anaesthesia examinations in Zambia occur twice yearly and are delivered through two training pathways: the Ministry of Health's Specialty Training Programme and the University of Zambia MMed programme. Although the curriculum is similar, this structure can make teaching fragmented, as trainees prepare for different examinations at different times. Examination formats are sometimes confirmed only shortly beforehand due to workforce constraints. During these periods, the ZADP team provided additional teaching and support. We also travelled to Ndola in the Copperbelt Province to deliver training to two trainees who were unable to attend regular sessions.

We also ran weekly departmental teaching sessions that included simulation of anaesthetic emergencies such as high spinal block and difficult airway management and gradually empowered senior local clinicians to be responsible for these sessions. I also established a "Breakfast Block Club," where I taught ultrasound fundamentals, techniques for common regional blocks and airway assessment. We also collaborated with visiting teams from the USA, who contributed to teaching in areas such as critical care and point-of-care ultrasound.

Supporting trainees with quality improvement projects was another key aspect of the fellowship. This included reviewing abstracts, advising on methodology, and supporting implementation of practice changes. Two trainees that I supervised will be presenting their projects at the World Anaesthesia Congress in Morocco in April 2026.

In October, the annual conference of the Society of Anaesthetists of Zambia took place, during which I delivered an ultrasound workshop, provided a lecture on local anaesthetic systemic toxicity for non-physician anaesthetists and led a keynote plenary session on training and retention in anaesthesia in Zambia.

The Zambian residents face considerable clinical and personal demands, irregular working patterns, and daily unpredictability and this affected some of the residents' mental wellbeing for whom I provided pastoral care, advocated for adjusted working patterns and offered practical solutions or sources of professional support.

We also participated in the Annual Review of Training Progression (equivalent to ARCP). These in-person reviews provided valuable insight into trainees' experiences and allowed discussion of challenges, bidirectional feedback, and identification of areas for development. During this process I recognised a recurring theme of lack of cohesion among residents. In response, ZADP introduced the "Bubble Programme," which grouped trainees across different years with fellows and consultants to encourage peer support and informal interaction. Another observation during the ARTP process was the administrative burden placed on a single consultant responsible for collating assessment evidence for all the trainees. I discussed the introduction of the role of Educational Supervisor with the training programme director, and consequently organised a course on Educational Supervision for existing or prospective

consultant anaesthetists. What started as identification of an unmet need resulted in a fully sponsored one-day hybrid course delivered by international faculty. We consequently included delegates from abroad, and ultimately had over 100 registered participants from 12 countries.

Personally, this fellowship allowed me to strengthen my clinical, teaching, presentation and leadership skills, whilst also allowing me to reflect on our roles and responsibilities in delivering safe surgery worldwide. I am filled with gratitude for the care we are able to deliver in the NHS, the opportunity to widen my skillset and outlook on the environments we practice in and the motivation this has given me to continue to contribute to advocate for access to high-quality healthcare globally.