

# Reflections from my Experience Volunteering in East Africa

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## Introduction

In late 2021 I embarked on an out-of-program opportunity as a visiting lecturer in anaesthesia at the College of Anesthesiology, Addis Ababa University. During my placement I had to evacuate the country due to the civil war in Ethiopia and spent two months in Rwanda. There I continued clinical teaching at a government hospital in Kigali. In this article I present four reflections from my exposure to developing world medicine in East Africa.

## Main reflections from my Visit:

### 1) Quality Improvement as an integral part of productive global health partnerships :

The remit of my placement was clinical teaching, but frequently I found myself wondering what I could offer trainees in Addis Ababa who were very skilled and very well read, and whose only limitations stemmed from the severe lack of basic equipment. I therefore dedicated one afternoon a week to Quality Improvement (QI) teaching. The Ethiopian Ministry of Health published some guidance in 2020 setting out an ambition to improve QI literacy amongst its institutions. In my view, this did not translate to the frontline practice within the anesthesiology department where familiarity with QI was limited. I provided teaching on QI tools and techniques, mentored several teams on department-selected priority QI projects and witnessed some excellent results.

One team looking at postoperative hypothermia used QI tools to map the causes of heat loss in theatre and ran three Plan-Do-Study-Act cycles.

The results which will be published elsewhere demonstrated a median improvement of around one degree Celsius using equipment easily available in the department. Reducing peri-operative hypothermia is known to reduce complications like delayed waking, surgical site infection, and delayed wound healing. Wins in this area are likely to have the knock-on effect of improving patient recovery, reducing inpatient stays and increasing throughput.

The early success of this and other QI projects was stark and gave pause to reflect on what a good model would be for UK based trainees to help clinicians meaningfully improve patient safety abroad.

While opportunities for clinical teaching abroad are commonly offered to UK trainees, are there other models for those wanting to create real and lasting change in the developing world? From my limited experience, QI partnerships might be one solution that combines teaching and tangible improvements to patient care.

### 2) Bridging the waste and want gap

I occasionally witnessed patient harm, and it was always due to resource poverty. I recall a toddler who sustained a large iatrogenic broncho-pleural fistula (BPF) during airway foreign body retrieval when suitably sized equipment was unavailable. Correcting this BPF required anaesthesia with lung isolation. No equipment was available to facilitate this, and the child suffered prolonged hypoxia until the bronchus on the affected side was clamped. In these kinds of scenarios, the clinicians do the best they can with the equipment available, but there is a ceiling beyond which clinical skill and knowledge cannot go, even to save a life.

Equipment shortages were not limited to specialist equipment. For a few months in one hospital most adult thoracic surgery could not be done due to the absence of double-lumen endotracheal tubes.

In both countries, to minimise the impact of equipment shortages, single use airways are commonly washed in a basic chlorine solution, or simply in soap and water, and reused over and over until their integrity is compromised. During an airway emergency, I recall running to multiple operating theatres trying and failing to find an oropharyngeal airway (OPA) for a hypoxic patient with unexpected difficult mask ventilation. In the UK it would be unimaginable to even start a case without a selection of different sized OPAs being available.

This is in grotesque contrast to the practice in parts of the UK where single use equipment is sometimes opened 'just in case' and discarded unused.

There is a safety argument for this sort of practice where the situation can deteriorate in seconds and equipment needs to be in hand immediately, but there must be a way to close the gap between the wastage in the UK and the needs of the developing world.

My reflection centres around what systems already exist to minimise this waste, and how to recycle unused equipment which would otherwise be destined for disposal. Bridging this waste and want gap could allow those excellent clinicians in the developing world to provide excellent patient care, reduce own industrial waste and reduce our impact on the environment.

### 3) The contrasting attitude to faith in the workplace

I recall attending morning handovers in Kigali where the entire department would stand for a Christian prayer for the success of the day and for the health of the patients. Orthodox crucifixes are worn proudly around the necks of most clinicians in Addis Ababa, while the rest wear hijab or excuse themselves to pray in their office at lunch time. Traditional Christian hymns were played in many operating rooms. This contrasts with my experience in the UK where visible demonstrations can be viewed with suspicion.

The intersection of faith and health however was not always harmonious.

I recall a two-year-old admitted for repair of an inguinal hernia whose body was covered in scars (figure 1). It was explained to me that the family had eschewed medical treatment in favour of traditional healers or 'witch doctors' who performed scarification to treat the hernia. In this case however the toddler had become malnourished and experienced a great deal of pain in his life. I engaged with the surgical team and learnt how traditional healing is viewed and accessed in the city compared to rural villages.

I discovered that traditional healing for minor ailments was not uncommon and in fact, some of the clinicians I worked with admitted to using witch doctors from time to time. However, because of the harm occasionally experienced by patients, educational programs in the rural countryside were set up to modify people's approaches to seeking treatment for their health problems (see the Figure 1 as an example of a practice of scarification to treat inguinal hernia).

It was my experience as a Muslim living in the west which made it possible to observe these practices without judgement; I drew parallels with Prophetic medicine and how therapies like cupping, which are accessed by many sections of the UK's Muslim community, attract suspicion from the wider medical community.

The challenge for me in my remit as a clinical lecturer was to experience the cultures without criticism or judgement, neither of which were invited, nor would have been helpful.

### 4) Enormous personal gain for trainees willing to 'just do it'

I travelled to Addis Ababa in the midst of a pandemic with my supportive wife and three young children, with whom I subsequently had to evacuate for Rwanda due to the threat of civil war in Addis Ababa. I get asked if I would do it all again and reply in the affirmative. The experience was transformative for many reasons.

For one, the cultural learning has positively changed some important lifestyle habits. Ethiopia follows Orthodox Christianity and adherents observe a vegan fast twice a week; with halal meat difficult to access, this impacted the food my family ate, massively reducing our meat consumption. Local produce was vibrant, abundant and cheap, and vegan cooking was nutritious and

seasoned with sophisticated Ethiopian spice mixes which kept everyone satisfied including the children.

Our family had a rapid education in gratitude. Seeing children young as four years old begging or working in the streets on a daily basis had the undeniable effect of providing perspective during domestic challenges. My children still sombrely recall the street children who would shine the shoes of, or weigh, passers by to generate an income.

The list of transformative experiences and observations could go on and on; the people on Rwanda were particularly generous, Kigali was beautifully landscaped, the wildlife in Rwanda which includes 'the big 5' is experiencing a major resurgence making for excellent short breaks, Rwanda has the world's only mountain gorillas, civic regeneration in Addis Ababa would make any major world capital city planner green with envy, the ancient Habasha culture of Ethiopia still impacts major facets of daily living, and so on.

While the decision to leave the comforts of the UK and immerse oneself in the developing world should not be taken lightly, the reality of the sociopolitical aspects means it cannot be easily and accurately risk assessed, and there is a leap of faith required at the beginning of such a placement. Instead of a leap of faith, a Muslim might say they have tied their camels and are leaving the rest to the Creator. Would I do it again? I look forward to it.

## Conclusion

My experience of developing world medicine was a valuable life lesson and has made me more grateful for our National Health Service. I was shocked at the degree of resource poverty I witnessed at the countries' largest government hospitals and the impact of that on patient safety and harm. There are many ways UK based clinicians can help improve patient safety in the developing world. Gifts of expensive technology are not one of them; rooms full of equipment sitting idle in need of service or repairs, neither possible locally, were testament to that. Instead, collecting clean single use equipment otherwise destined for disposal could offer one solution, and education programs in QI, systems and process improvements could be sustainable and inexpensive way to continually improve care and outcomes in the developing world. There is enormous mutual benefit in continuing these sorts of partnerships

and I would encourage any UK trainee considering time abroad to take that leap for a truly paradigm shifting experience.



*Figure 1 : Scarification to treat an inguinal hernia*