

## Anaesthesia afloat

### **Developing World Anaesthesia: Mercy Ships, Guinea, West Africa**

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The Royal College of Anaesthetists (RCOA) is committed to forging and nurturing relationships with doctors and institutions from other countries. The RCOA Global partnership strategy 2016-2019 champions support and training for UK anaesthetists in lower and middle-income countries (LMIC) and has established high quality fellowship programmes to enable trainees to undertake placement overseas.

In October, this year I was fortunate enough to undertake a 2-week placement with Mercy Ships in Guinea, West Africa, in the role of anaesthetic assistant. Mercy Ships is a faith-based international development organisation that deploys hospital ships to the poorest countries in the world, delivering vital, free healthcare to people in desperate need. Conditions requiring surgical treatment kill more people in low-income countries than HIV/Aids, TB and malaria combined. Globally, five billion people have no access to safe, affordable surgery when they need it. As well as completing thousands of urgent operations onboard its “floating hospital”, the Africa Mercy, Mercy Ships volunteers also work closely with host nations to improve the way healthcare is delivered across the country, by training and mentoring local medical staff, and renovating hospitals and clinics. The RCOA advises risk of death from anaesthesia in the UK as 1 in 100,000. It is speculated that in Guinea this figure is more like 1 in 100. Emphasising the potential value in mentoring local anaesthetic providers.

The Africa Mercy embarks volunteers from over 49 nations. The hospital includes 5 operating theatres, recovery room, 3 bedded intensive care unit and wards totalling 80 patient beds. The onboard surgical capacity is around 7000 interventions per year, instruments of note include CT scan, X-Ray, laboratory services, sterilization facility and data transmission with onboard satellite communication. Crew blood bank is an invaluable onboard resource with the capacity for storage of whole blood and access to 24hour on call emergency donors.

The ship undertakes annual 10-month field services to chosen nations. The ship arrived in the port of Conakry, Guinea’s capital city in August 2018 and will remain until the end of the field service in June 2019, when it will depart for its annual servicing and refit in Las Palmas, Gran Canaria. The goals for the field service mission in Guinea are:

73+	ORTHOPAEDIC SURGERIES
388+	MAXILLOFACIAL SURGERIES
134+	RECONSTRUCTIVE PLASTIC SURGERIES
380+	GENERAL SURGERIES
914+	OPHTHALMIC SURGERIES
59+	WOMEN’S HEALTH SURGERIES

The online application process and HR services Mercy Ships provide was extremely smooth. Being an anaesthetist in a training rotation, moving jobs 6 monthly, I can solidly say that this process was the smoothest job transition I have ever made. There is an online community of volunteers and questions are readily answered on it’s forums and a small amount of painless online training is mandated before departure from the UK.

After being approved for service following review of my online application I was placed in the “Talent Pool” waiting for a position to come up. Normally this can take months however I was contacted within a matter of weeks and offered a 2 week placement as Anaesthetic Assistant. Anaesthetic Providers (lead anaesthetists) need to be ST5+, so this role is open to ODPs, US nurse anaesthetists, anaesthetic nurses and anaesthetists prior to ST5.

Arriving on the ship was daunting, I had no real idea of what my role would be or how much anaesthesia I would be permitted to do myself. The cases seemed complex and dissimilar to UK cases. However the equipment was excellent and all very familiar, the ship was well equipped with Glidescope, C-MAC, Airtraq and a range of fiberoptic scopes.

My fears were settled upon commencing the first case with an Australian consultant. He soon established my competencies and was thrilled to have an assistant he could clinically rely on to share the workload of pre-assessments, cases and ward reviews. I would describe my clinical experience on board as very similar to training lists in the UK, but with a constant flow of challenging cases and special procedures, of which trainees often hunt down at home in their own hospitals. I performed 10 awake fibre optic intubations (AFOI), multiple RSIs for potential difficult airways and learned new regional techniques.

The most rewarding experience was mentoring local anaesthetic providers, focusing on the basic tools known to save lives in surgery; continuous pulse oximetry, WHO Surgical Safety Checklist and drug dosing calculations.

## Summary

This placement was of immense clinical value:

- In gaining procedural skills in regional anaesthesia
- In gaining experience of difficult airway management and AFOI
- Operating in a resource limited setting
- Operating safely in a multi-national team with patients who do not speak English
- Mentoring local anaesthetic providers



*Operating theatre team*