

Congo – now a SAFER place?

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Introduction

This was the first SAFE (Safer Anaesthesia From Education) obstetric anaesthesia course run entirely in French and a big thank you must be given to all those who assisted for weeks in advance with translation, also to the IRC of the AAGBI for their generous contribution towards the cost of flights and to Mercy Ships for providing free accommodation and food on board the *Africa Mercy*.

The UK Team (fig 1)

Keith Thomson, Consultant Anaesthetist, Basingstoke
Wynne Davies, Consultant Anaesthetist, UCH, London
James Eldridge, Consultant Anaesthetist, Portsmouth
Emma Halliwell, Consultant Anaesthetist, Salisbury
Viv Rusman, Associate Specialist in Obstetrics, Guildford
James Leedham, ST6 Anaesthetist, Manchester
Richard Ramsaran, ST6 Anaesthetist, Manchester
Lorna Howie, ST6 Anaesthetist, Manchester
Savini Wijesingha, ST3 Anaesthetist, Edinburgh
Nikki Cox, CT2 Anaesthetist, Salisbury
Therese Prunet Brewer, Translator, Windsor
Stephanie Bazin, Translator, Ottawa, Canada



Fig 1. The team beside the Africa Mercy

Everyone met at Charles de Gaulle Airport in Paris on the evening of Saturday 22nd of March 2014, then flew overnight to the port city of Pointe Noire in the Republic of Congo. We arrived at 7am and were transported to the *Africa Mercy* which was to be our home for the rest of the week. There were over 400 volunteers on board the Mercy Ship representing 31 different nations and we were honoured by being allowed to stay in guest cabins (fig 2).

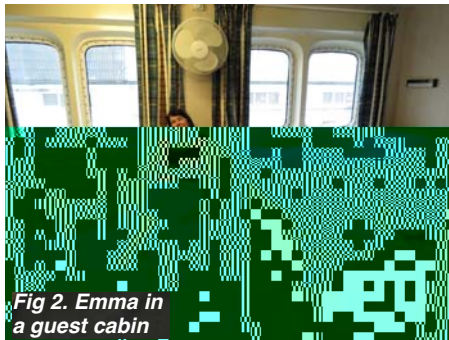


Fig 2. Emma in a guest cabin

Later in the day no-one was allowed on or off the ship because of an impending presidential visit. On the docks there was a large poster of President N'Guesso alongside the Mercy Ships founder Don Stephens. The president gave an excellent speech to a packed International lounge during which he praised the work of Mercy Ships in his country and told the associated press that

they ought to concentrate 'on a good story like this rather than social functions.' Then Gary Parker, the long term maxillofacial surgeon, gave a presentation during which he showed some very moving before and after photos of patients who had received surgery on board. He also praised the skills of a local Congolese surgeon who was working with him. The President and his significant entourage then went on a tour of the ship concentrating particularly on the hospital (fig 3).



Fig 3. The President on the ward with Don Stephens and Dr Gary Parker

Local Hospital in Pointe Noire

The following day the whole team went to visit Loandjili Hospital where we were received by anaesthetist Dr Doriane Makambila whom I had met before on two occasions: the previous May in Brazzaville and in 2009 in Cotonou. She kindly guided us round the hospital which was undergoing extensive renovation.

We saw the operating theatres (fig 4),



Fig 4. In the operating room at Loandjili

the intensive care unit (fig 5), the



Fig 5. Patient in the ICU

emergency department and the maternity unit, which had 3,500 deliveries a year with about 700 caesarean sections which were mainly performed under spinal anaesthesia with plain bupivacaine.

Available anaesthetic drugs included propofol, halothane, fentanyl and morphine, there was a supply of sevoflurane but no suitable vaporisers. There were newish anaesthetic machines and halothane vaporisers but we did not see any of the equipment being used (fig 6).

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Fig 6. Wynne with a rebreathing bag



There was both piped oxygen and a supply of cylinders (fig 7).

Fig 7. Savini + O₂ cylinders



We spent time talking to the senior general surgeon (fig 8) who had done some of his training in the USA.



Fig 8. With anaesthetist Dr Makambila and the senior surgeon

He informed us that the Government is planning to build a 600 bed hospital in each of the 14 provinces in the country but he was unsure how they would be staffed. We discussed a wide variety of topics including circumcision. Apparently female circumcision is not performed in the Congo but male circumcision occurs at the age of 14 in front of friends and

family members. The instrument used is a long knife which is heated up in a fire before being used (a sort of machete diathermy!). If the poor teenager makes any noise he is said not to have become a man. The view from the top floor of the hospital included the *Africa Mercy* in the docks (fig 9). In the hospital car

Fig 9. *Africa Mercy* in the distance



park there was a large van (fig 10)

Fig 10. Free anonymous HIV test van



where people could go and have a free anonymous HIV test, but apparently the rate of HIV in the Congo is only about 2%.

That afternoon a few of us went to visit the conference venue, the *Centre Culturel John Baptiste* (fig 11).



Fig 11. Conference venue

I took with me a multi-adaptor which lights up if there is power to confirm which sockets in the main lecture theatre worked. Back on the Ship everyone was finalising their presentations and content for breakout sessions (figs 12, 13). Dr Michelle, the consultant anaesthetist in charge of anaesthetic services on board the ship, gave a good overview to the team of the plans for the SAFE course beginning the following morning.

Fig 12. Finalising presentations



Fig 13. James finalising French translation with Stephanie

The SAFE Conference

Day 1 was devoted to airway management and basic general anaesthesia. After registering, each of the 30 delegates (excluding the two physician anaesthetists Dr Poisson Benatouil and Dr Makambila (fig 14) was



Fig 14. Dr Poisson Benatouil and Dr Makambila, local physician anaesthetists

assessed on one of four 'skills stations' (fig 15) and then was given

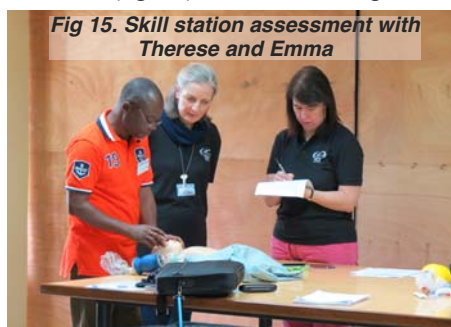


Fig 15. Skill station assessment with Therese and Emma

an MCQ to complete (fig 16). After an introduction by Michelle and I (fig 17), Wynne opened proceedings with a lecture on The Airway and General Anaesthesia.

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Fig 16. MCQ



Fig 17. Opening presentation by Michelle

The four workshops which followed, each run by two faculty members and a translator, included 1) assessment of the airway, 2) management of the airway, 3) rapid sequence induction and 4) extubation. Interestingly none of the delegates said that they pre-oxygenated for 3 minutes with a tight fitting mask and some even said that they let their patients go hypoxic to encourage them to breathe at the end of surgery which was rather worrying.



Fig 18. The lunch venue

After an excellent lunch (fig 18), topics for the afternoon advanced airway breakout sessions (figs 19, 20)

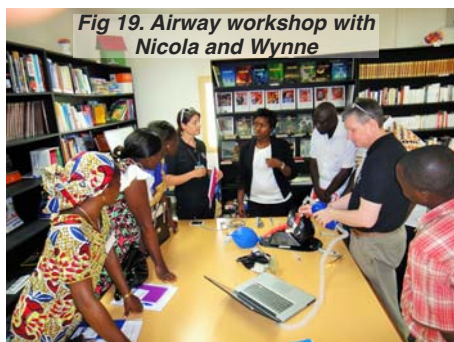


Fig 19. Airway workshop with Nicola and Wynne

consisted of 1) difficult intubation, 2) failed intubation, 3) cricothyroidotomy, and 4) recovery + post-op



Fig 20. Airway workshop with Savini and James

analgesia. Two topics on general anaesthesia were covered after tea: 1) assessment and preparation and 2) GA

A particularly useful piece of equipment brought by a team member was a roll of 'white board' – www.thewhiteboard.co.uk



Fig 21. Vivian, our obstetrician

Vivian (fig 21), the token obstetrician among ten anaesthetists, was born in Indonesia, brought up in Holland and now lives in London. To her credit she managed to actively participate in some of the more anaesthetically orientated workshops.

The second day of the Conference began energetically at 6am for Savini and I with a 45 min jog out of the Port gates to the beach and back. In the Port we passed an area full of felled tree trunks (fig 22) which a recent BBC documentary had suggested were illegally sourced valuable hard woods from inland rain forests. The conference topics that day were on various aspects of spinal anaesthesia for caesarean section.



Fig 22. Hard wood waiting for export

The first breakout sessions (figs 23, 24) consisted of 1) anatomy and



Fig 23. Spinal anaesthesia workshop with Lorna, Emma and Therese



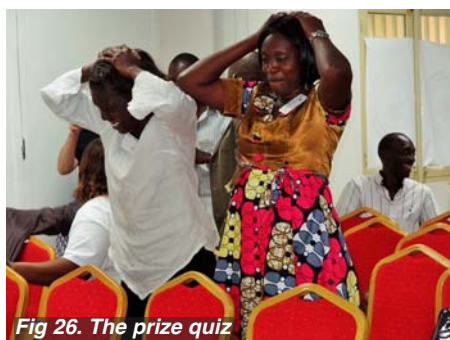
Fig 24. Workshop with Richard and Vivian

conduct, 2) failed/difficult spinal. After a tea break four more topics were covered: 1) hypotension, 2) high/total spinal, 3) PDPH prevention and differential diagnosis, 4) neurological complications. Krissy from Mercy Ships, who was helping with conference logistics, received a phone call from the nearby Adolphe Sicé Hospital enquiring whether they could borrow a neonatal manikin.

Krissy and I drove to the hospital to see what was happening. We visited anaesthetist Dr Paulin Mavoungou, whom I had also met in Brazzaville the previous year, and loaned him a manikin as requested. Two French anaesthetic nurses from Marseille were about to start a training course on neonatal resuscitation to 10 anaesthetic nurses from that hospital, which perhaps accounted for the decrease in attendees at our conference.

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The afternoon session went well, beginning with a lecture on Maternal critical care and resuscitation followed by breakout sessions on 1) physiology of pregnancy, 2) recognition of the sick obstetric patient, 3) principles of critical care, 4) maternal CPR, 5) sepsis/HIV. These sessions were followed by the quiz (figs 25, 26) where questions in powerpoint are projected onto a wall.



Delegates who think the question is true put their hands on their head and if false by their side. Those who answer the question incorrectly sit down and the whole process continues until there is a winner. Unfortunately the French translation of one of the questions proved to be ambiguous so I decided to discard it but only after the delegates had chosen their answers. This nearly caused a riot. All those participating became incredibly heated and it took some minutes to restore calm.

After returning to the Ship the whole team went for dinner at an excellent beach restaurant called Pyramide.



The interesting menu included goat's cheese and honey pizza and various

fish dishes (fig 27). After returning to the docks we found near the *Africa Mercy* a hive of activity where many different species of fish were being sorted (fig 28) and packed in ice.



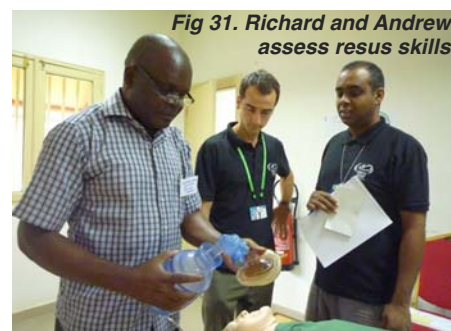
The cases were probably taken to the nearby Hong Kong registered bulk carrier, the *Kang Yuan*. The Chinese managing the process did not wish to be photographed.

The third day of the Conference began with an excellent lecture by James senior on Eclampsia and Pre-eclampsia. This led to a discussion about the fact that Magnesium sulphate was unavailable in the country and so what should they use? The only available similar medications were either magnesium chloride or gluconate but with the help of an I-phone, equivalent doses were suggested. Breakout sessions before the coffee break consisted of 1) management of pre- eclampsia, 2) management of fits and after the break: a lecture on Major Obstetric haemorrhage followed by workshops on 1) estimation of blood loss (fig 29),



2) fluid / blood replacement and 3) haemorrhage control. After another excellent lunch the final workshops were 1) anaesthetic management of ruptured uterus, 2) anaesthetic management of cord prolapse, uterine inversion and anaphylaxis.

At the end of the course the majority of the delegates redid the same MCQ and clinical skill station (figs 30, 31).



The results of the multiple choice had not changed significantly but the clinical skills showed a slight improvement. The quiz took place, this time without a riot, as we made sure all the questions had been checked by a second translator.

It was then time for the closing ceremony which included the handing out of prizes, logbooks, DVDs and attendance certificates (to all attendees including the faculty (figs 32, 33), each delegate also



received a copy of the recently translated French version (*Anesthésie à Moindre Risque*) of the Lucille Bartholomeusz textbook *Safe Anaesthesia* (figs 34, 35).

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Fig 34. Donated textbook



Fig 35. Books for all



This was followed by group photographs (fig 36).

Fig 36. Delegate group photo



In all, 35 delegates had attended some or all of the days. These included 25 nurse anaesthetists, 3 physician anaesthetists, 4 midwives and 3 obstetricians. In many respects the unsung heroes of the conference were our translators, Therese, Stephanie (from Ottawa in Canada), Jim (from Australia) whose wife was working as an anaesthetist on the *Africa Mercy*, and locals, Francis and Stella. They all did a fantastic job and worked unstintingly (fig 37).

Fig 37. The 'hero' translators



That evening the whole team attended the Thursday evening community meeting on board and were privileged to hear the Mercy Ship's founder president, Don Stephens give a brief and very personal account about his experiences over the past 40 years.

The last day (for most of the team)

After another 6am run, avoiding the blue coloured taxis (fig 38), to the



Fig 38. local blue taxis

station (fig 39) and beach with Savini

Fig 39. Pointe Noire station



and Stephanie followed by breakfast, we joined the rest of the team in the International Lounge where we had been asked to give a presentation to other crew members about the conference. After a brief introduction Richard gave an excellent presentation, at the end of which a short video by Savini was shown which included complimentary comments by delegates.

See <http://vimeo.com/91066502>

The team went on a fascinating guided tour of the engine room kindly organised by the chief engineer (fig 40) who was, like Savini, also

Fig 40. Chief Engineer in the control room



from Sri Lanka. We saw the main engines and learned all about the generators, sewage system and electrical power requirements of various

Fig 41. 2nd engineer Mick



parts of the ship from Mick the hilarious Australian 2nd engineer (fig 41). The final activity on the tour was climbing up a series of ladders inside the funnel to eventually emerge on deck 7 beside a container in which was the oxygen concentrator providing the essential oxygen supply for the operating rooms and the wards (fig 42). This was of particular interest

Fig 42. the oxygen concentrator



to me as 20 years ago I had fundraised to install an O₂ concentrator on the *Anastasis*.

Some of the team then went to the *Atlantic Palace Hotel* for a beer (fig 43), lunch and a swim (fig 44) in the

Fig 43. A beer or two by the pool



spectacular outdoor pool. Prior to this some of us purchased onyx and verdite carvings at the nearby craft market. That evening all the team except Stephanie and I departed on the overnight flight to Paris and then on to London or Manchester.

the longest serving African crew members. Many of the patients who attended had bandages round their heads after removal of facial tumours (fig 46). The service consisted of

Unfortunately James, Vivian and Emma were all rather under the weather with a diarrhoea and vomiting bug but, although tempted to stay on for another couple of days the cost of £1500 each to change flights influenced the decision to leave as scheduled!

The next day it rained almost continuously but in spite of this we returned to the hotel swimming pool. *The Atlantic Palace Hotel*, even by European standards, was relatively expensive and cost me the equivalent of \$16 to buy one large cappuccino and a pot of tea but as Mercy Ships volunteers have free access to the pool and nearby facilities one could not complain. That evening I had dinner at an excellent Indian restaurant called *The Grill House* with Dr Gary Parker the maxillofacial surgeon, who has worked on board the a Mercy Ship for the past 27 years. We had been friends since my first visit to the *Anastasis* in Ghana in 1991. We returned to the ship for 'film night' during which six 5 minute home made movies were shown. The very amusing winner had been made by a teenage team which included Gary's son, Wesley, and was entitled 'what to do while waiting for the internet to load!'

The next day was Sunday and after a solo run along the beach and back again followed by breakfast I attended the ward service, taken by my old friend Clementine Tengue (fig 45) from Togo, who is one of

much drumming and singing followed by an excellent presentation by a lady Afro-American pastor who was the current head of Mercy Ministries on board.

After the service I managed to download the Air France boarding cards for Stephanie and I using my battery operated portable HP100 mobile printer. Later in the day we were driven to the airport with David, a volunteer from Canada. Amazingly, David remembered sharing a room with me on board the *Anastasis* in 1994! We all proceeded through the various levels of security at the airport but, after having my bags and myself X-rayed without triggering any alarm sounds a security man insisted I emptied out all my pockets. In one of which was 12,500 (about \$25) of the local currency which he immediately confiscated and handed to a female colleague who pocketed it. Apparently one was not allowed to remove local currency from the country – I imagine this is a regular