

PTC Guinea 4/5th March and 11/12th March 2019



Data from the World Health Organization estimates the total population of Guinea as 12.4 million (2015). Health spending is approximately \$122 per capita, equating to 4% of GDP.

Life expectancy at birth is 57 years for men and 59 years for women. There is a significant shortage of health careworkers, with fewer than 2 doctors per 10,000 population. Healthcare is unevenly spread with most services centered in and around the major cities. The provision of anaesthesia is based on nurse anaesthetists with one year's training, many of whom have trained abroad, or local diplomated nurses. There are estimated to be less than ten physician anaesthetists in the country. There is a major lack of basic equipment, medicines and supplies, even in the main hospitals. Ketamine remains the standard anaesthetic induction agent, and intubation is generally avoided due to lack of muscle relaxants, intubation kit, and training. An anaesthetic nurse training course is expected to begin in November 2019 in Conakry.

French is the official language and there are many local dialects

PTC was started in Guinea by Mercy Ships with the first 2/1/2 course in Conakry in November 2018. This course was followed by a second 2/1/2 course in January, run by local instructors with mentorship by overseas instructors. It was already planned that in March Mercy Ships would try a new formula, going up country to two regions and running a two day PTC provider course followed by a shortened two day SAFE (Safe Anaesthesia From Education) obstetric course. SAFE has been taught in November in Guinea. It was decided by Mercy Ships to run provider courses only in the interior as travelling to Conakry was difficult for the candidates and there would probably not be many potential instructor candidates in the peripheral hospitals.

The foreign faculty was composed of four instructors:

Jeanne Frossard (Consultant anaesthetist UK) PTC lead
Kate Holmes (Consultant anaesthetist UK)
Neil Muchatuta (Consultant anaesthetist UK) SAFE lead
Miriam John (ED doctor)

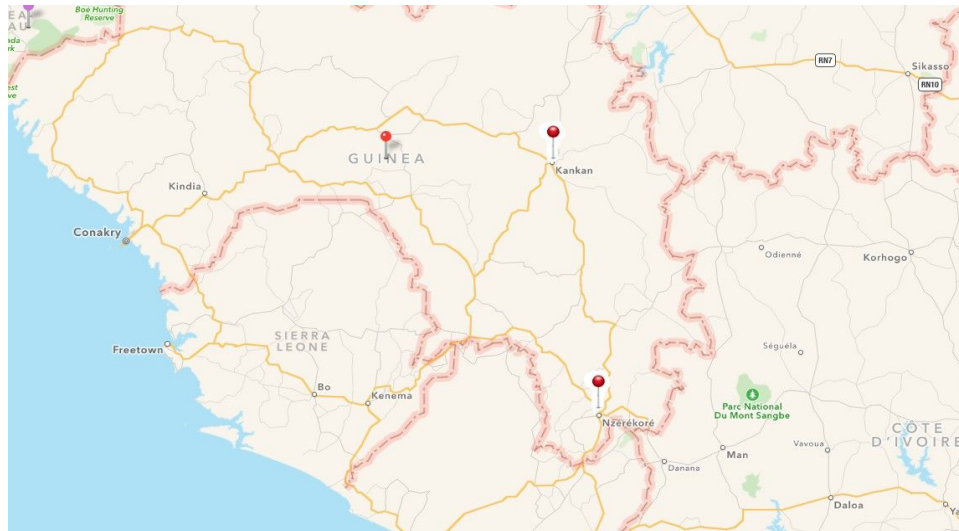
We were joined in Nzerekore by Dr Balla, who is a general practitioner and surgeon in Macenta district hospital. He was trained in PTC last year in Conakry and was part of the faculty for the January 2/1/2 course.

Mercy Ship Administrator
Tsiferana Rakotoarisoa

Interpreters/ Drivers
Hamidou Bangoura
Isaac A. Loisel
Lam Samba

The standard 2 day course was delivered in both places. Translators were used for three of the faculty.

Unfortunately we could not use local faculty as the Guinea faculty does not include anaesthetists and anaesthetists were needed to deliver SAFE obstetrics.



As it can be seen from the map the distances are very long and the quality of the roads was very variable. Two days were required to travel to Kankan and a further two days on to Nzerekore

Kankan



There were 14 course participants comprising a mixture of ED doctors, surgeons, general physicians who also performed surgery, ED nurses and ward nurses, The venue was in the regional hospital. A large sized room was provided and despite staff meetings in the room as the course should have started, the course went according to plan. It became apparent that the MCQ was quite difficult for the participants to read in French and so it took longer than usual and this is probably reflected in the results. We had not found someone to do the local trauma perspective so this was done as Q and A session that worked quite well. The lectures were adapted according to local knowledge.

Equipment had been adapted for this course as we had to transfer all the equipment in the cars so we dispensed with the goat carcass and used a replica small thorax made of bamboo, foam rubber and clingfilm, and a small paediatric dummy doll (see photograph) had been made out of local materials for the paediatric scenarios. The dimensions the cardboard collars were given to the candidates so they could make them themselves The skill stations were adapted when we discovered that in general, patients were not intubated, spinals were not performed and most anaesthesia was completed with combination of ketamine and Diazepam without muscle relaxation. Chest drains were not inserted. Pneumothorax was only treated with a needle decompression. However the emergency doctors understood all the principles of chest drains and were happy to try to make up equipment so that they could start insertions and they were very pleased to learn these skills. Similarly they were happy to use adapted equipment for intraosseous insertion. They already sometimes used the strong needles from the blood transfusion bags

PTC Kankan feedback

This was taken as a brainstorming session as Mercy Ships keep the feedback records.

What was good about the course?

The workshops

There was time to respond to questions

Improvement of competence

Patient management

Teaching methodology

Good explanations

Good relationship with teachers and participants

Scenarios

ABCDE

Availability of the faculty

Motivation of the participants

Changing attitudes

What could we improve?

Course needs to be three days x3

Need to speak good French x2

Nothing x2

Transport to the venue

Hand over the teaching materials when you leave

MCQs

Pre course 44%

Post course 61%

Confidence matrix

Pre course 39%

Post course 68%

PTC Nzerekore



The venue was a small hotel with a good but small conference centre. The participants had come from five different areas.

The same format was followed with the combination of PTC and SAFE

There were 16 participants from nine different hospitals/clinics, a mixture of anaesthetic nurses, ED nurses, surgeons and midwives. Six of the participants from PTC joined the SAFE courses.

We were very fortunate that Dr Balla travelled 150 kms to help us as faculty. He delivered many lectures in French and did an excellent, lively disaster management session.

The results were as follows:

Pre course MCQ 39%

Post course 55%

Pre course Confidence Matrix 53%.

Post course 74%

As this is the first time a mobile course has been run, it was very good to see that it was a success and appreciated by the local participants. Mercy Ships are planning on the same formula in Senegal when the ship moves on next year

Acknowledgments

We are most grateful to Mercy Ships for help in planning and preparation, provision of support staff during the course, provision of accommodation and food for the team, Also many thanks to the experienced translators who also served as great drivers and companions throughout the trip. Heart felt thanks to Tsiferana and her team who gave us outstanding support.



Jeanne Frossard