Dr Keith D Thomson MB BS, DRCOG, FRCA



The beautiful island of Madagascar (fig1), larger than the UK, is situated in the Indian Ocean off the East coast of Africa. It has a population of 23 million, 90% of whom exist on less than \$2 / day. It boasts a unique collection of fauna (fig 2) and flora found nowhere else on Earth.



Main exports include vanilla, litchis, unique stone popular for European bathrooms and minerals like nickel and cobalt. There is tourism, sadly some of which involves a very active sex trade. Hotels and restaurants are remarkably cheap. My visit was divided into two parts. The first week spent on board the *Africa Mercy* and the second week co-ordinating a three day anaesthesia conference in the capital city Antananarivo, known locally as 'Tana'.

Effect of ebola

Because of this devastating epidemic with at least 60% mortality that has resulted in well over 10,000 deaths, it is difficult to predict when the Mercy Ship will return to the affected nations of Sierra Leone, Liberia or Guinea whose people the organisation has been serving for over 20 years.

Hopefully this tragic situation will soon be brought under control and an effective vaccine, acceptable to the local population, will be found to prevent the virus becoming endemic. The ship performs elective surgery for people in need, of all faiths and none, in her 5 on board fully equipped operating theatres. She is not equipped to be an isolation unit for ebola patients - you do not go into McDonalds and order a pizza! The ship, a magnet for ill people in countries she visits, cannot risk having a case on board with the ensuing consequences for her 450+ international volunteers and crew.

The outstanding new Managing Director of the *Africa Mercy*, formerly head of Nestlé and Businessman of the Year in China in 2013, is Swiss Mercy Ships board member Roland Decorvet (fig 3).



He is on board for one year until June 2015 with his charming Madagascan wife and four young daughters. Because of family connections, signing of the protocol with the Madagascan Government was much easier and far quicker than previously experienced in any other African country. It only took three days by fax rather than several months.

This was essential as the ship was at one time docked, after completion of its annual checks and repairs, in the Canary Islands with nowhere to go after planned visits to Conakry, then Cotonou and finally Pointe Noire were negated by the risk or perceived risk of ebola. The ship took 6 weeks to travel to Madagascar which included three weeks in Cape Town. This was just enough time for the Mercy Ships 'advance team' to set up all the required logistics for her arrival in Toamasina on the 27th October to be greeted by a dockside welcoming party which included both the President and the Prime Minister.

Visit to the Africa Mercy

After an 11 hour flight from Paris to Tana, a very short night at the Hotel Chez Jeanne (fig 4), not helped by a



time change of +3 hours and minus the bag containing my clothes (the one with conference equipment arrived but with a spare set of clothes and a tube of washing liquid in my hand baggage I managed for a week), I survived a 7am-6pm bus journey to



the Port city of Toamasina (Tamatave in French – fig 5). My delightful colleagues were a travel sick American nurse,

a Dutch ODA, a Ghanaian motorman and the ship's Nigerian HR manager. A microcosm of the over 40 different nationalities represented on board the ship. Barry, our local driver, was excellent and managed to avoid a stream of large lorries coming the opposite way (fig 6) – eventually





arriving at our destination (fig 7) after 11 hours travelling along roads lined by lush vegetation after we had escaped from the congested streets of the capital city Antananarivo where brickmaking (fig 8) seemed to be a popular industry.



On the outskirts of the city we passed some very attractive houses (fig 9).



In Tamatave we saw examples of the local transport called the tuk tuk or the man powered version – the pousse pousse (fig 10), the ship even had its own variety (fig 11) to





transport crew members, who were not keen on walking, to the dock gates. That evening I briefly met two surgeon friends who would be leaving the following morning: Dr Peter McDermott from the UK and Dr Robert Olupot whom I had met three years before in Hoima Hospital in Uganda.

First two days on board

I attended the Sunday service on the ward with some crew members, nursing staff and patients. There was much singing and verbal testimony in Malagassy given by some of the latter. I then had lunch with my good friend maxillofacial surgeon Dr Gary Parker (fig 12) and his wife Susan



whom I have had the privilege of knowing for 24 of the 28 years they have served on board. Dr Gary was the UCLA alumnus of the year in 2014 and it is well worthwhile listening to his speech delivered to the dental graduates.

https://www.dentistry.ucla.edu/ content/2014-commencementspeech



That afternoon I visited the local market (fig 13) with my travel companions Sandy and Aedzer, drank some coconut milk (fig 14) and



took photos with the *Africa Mercy* in the background (fig 15).



The next morning I joined the guided tour of the ship with other recently arrived volunteers. We visited various essential places on board like the dining room (fig 16),



the galley (fig 17), international





lounge (fig 18), the laundry room (fig



19), the internet café (fig 20), the



ship's shop (fig 21), the chaplaincy (fig 22), the bank (fig 23) and the

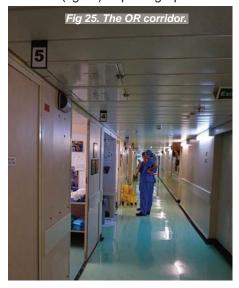








swimming pool (fig 24). That afternoon I visited the suite of 5 operating theatres (fig 25). I photographed the





recovery area (fig 26), pharmacy



(fig 27), sterilising unit (fig 28),





the laboratory (fig 29) and CT scanner (fig 30).



Fig 31. Anaesthetists from Australia.

There was an enthusiastic anaesthetic team on board (fig 31) using modern machines and monitoring equipment (fig 32). I chatted with



American orthopaedic surgeon Frank Haydon who has a personal series of several hundred operations to correct Blount's Disease in children. There is a girl from Nigeria for whom I am trying to organise corrective surgery in Bristol but a much better option might be for Frank to operate on board the ship. This I discovered would not be possible in Madagascar as the protocol does not allow treatment of patients from other countries. During supper I had an interesting chat with a senior crew member who told me that of the 250,000 population in Toamasina about 30,000 were prostitutes who charged only \$10/client 80% of whom were local and 20% European. Apparently there are also 50,000 women in the country suffering from VVF (vesico-vaginal fistula) with 2000 new cases occurring annually. This is perhaps due to the very low rate of caesarean section probably related to the \$120 cost which is beyond the means of the majority of the population. Apparently only 250 repair operations were performed in 2014 by 15 local surgeons. The ship will do 600 cases on board before she leaves in June 2016 and the Freedom from Fistula Foundation are planning to set up a unit in a nearby hospital to continue surgery and training after the ship departs.

Dockside Screening

Dr Gary spent a day selecting patients for surgery who had already been pre-screened by nursing staff in remote locations. I did an pre-anaesthetic assessment of 31 patients of those who were chosen. These cases consisted of a veritable textbook of pathology including: 11 clefts, 3 mandibular tumours (fig 33),



2 noma, 2 submandibular masses, and one case each of nasal carcinoma, lymphangioma of the tongue (fig 34), cherubism, Treacher Collins





Syndrome (fig 35), epulis (fig 36),



TMJ ankylosis (which would require fibre optic intubation – fig 37),



haemangioma of the lip, plus a child requiring femoral osteotomy for Dr Frank.

I had two excellent translators, Nathaniel and Maria – the latter had a two-year-old daughter by a South African 'husband' who worked for the local *Ambatovy* mining company.

Nautical neighbours

Other vessels were continually arriving and departing from the busy Port but I found two of particular interest. The 'Glorious Leader' I initially assumed was from North Korea but this was not the case as she was a vehicle carrier built in Poland and registered in the Bahamas (fig 38).



The Peaceboat (<u>www.peaceboat.org</u>) the Ocean Dream was a 35,000 tonne vessel built in Denmark in 1981, registered in Monrovia with a home Port in Japan. She acts as a 'floating peace village' and takes up to 1500 passengers and crew on 'Round the World' cruises. It was interesting to compare her with the 17,000 tonne Africa Mercy (fig 39) as



she is almost the same size as a future Mercy Ship which is currently in the design phase.

WHO Safer Surgery Checklist training

After my 6am pre breakfast jog, I helped long term anaesthetist Dr Michelle White from the UK and other Mercy Ships medical staff run a training day at the local Hospital du 'B' attended by 30+ local staff (fig 40)



including two surgeons, Consultant Anaesthetist Dr Marinette (fig 41),



Fig 41. With Drs Michelle and Marinette anaesthetic and theatre nurses. After initial presentations the idea was to encourage the delegates to design a safe surgical checklist suitable for their own needs. It was apparently very expensive for a patient to undergo surgery, about \$500, but with no routine swab or instrument count and debatable infection control techniques – the outcome from operations may not be too good but the Mercy Ships team is planning to address this situation.

During that day I took the opportunity to visit the very busy and well equipped dental clinic (figs 42, 43)







co-ordinated by UK dentist Dr Simon Crewe (fig 44) where extraction was the name of the game rather than conservation. The ship is very dependent on the many remarkable volunteers (fig 45) from 40+ different



countries who serve on board from two weeks to a lifetime (Dr Gary).

The following day Dr Michelle and I took an Air Madagascar flight to Tana which departed 25 min prior to the scheduled time. It was a smooth flight with no problems, definitely a less tiring journey than the outbound bus trip. We landed safely 45 minutes later to be greeted by Krissy Close, the Medical Capacity Building Manager, who transported us to the hotel where I would stay for the remainder of my time in the country with my conference team scheduled to arrive the following day.

Ship's itinerary

June - 3rd August 2015, Shipyard in Durban, South Africa 9th August 2015 - June 2016, Toamasina, Madagascar www.mercyships.org