

## The Second Liberian Anaesthesia Conference

**Dr K D Thomson**  
 MB BS, DRCOG, FRCA  
 Consultant  
 Obstetric Anaesthetist  
 Basingstoke and North  
 Hampshire Hospitals  
 Foundation Trust

**JFK Hospital, Monrovia**  
**5-7 November 2008**

### Topics:

1. Obstetric Anaesthesia
2. Paediatric Anaesthesia
3. Trauma Management

**Faculty:** Four of us work in the UK as consultant anaesthetists. We were joined in Monrovia by Dr Sarah O'Neill an SpR in Oxford who was working on board the *Africa Mercy* and Dr Stella Eguma recently appointed at the JFK Hospital.

**Dr Keith Thomson**  
 (Basingstoke)

**Dr Alexandra Bojarska**  
 (Manchester)

**Dr Anuraag Guleria**  
 (Leeds)

**Dr Michael Dockery**  
 (Kirkcaldy)

**Dr Sarah O'Neill**  
 (Africa Mercy)

**Dr Stella Eguma**  
 (Monrovia )

### Sponsors:

Association of Anaesthetists GBI;  
 World Federation of Societies  
 of Anaesthesia;  
 Mercy Ships (accommodation and  
 transport to the JFK hospital)

### Attendees:

26 anaesthetic nurses and 3 others (fig 1), 19 of whom also attended the first conference during 15-17 November 2007 which was run by Dr Keith Thomson and Dr Alex Bojarska.

### Introduction

Anaesthesia in post war Liberia is in crisis. There is only one anaesthetic nurse per 100,000 of the population as opposed to one medically trained anaesthetist per 6000 in the UK.

There is only one training school which is situated at Phebe Hospital and Nursing School about 3 hours drive north of Monrovia the capital. There are currently six trainees in the first year and three in the second year. In Monrovia the last trainee graduated in 1983. The youngest anaesthesia provider is 46-years-old and five others have been persuaded recently to come out of retirement.

Dr Stella Eguma, an experienced consultant from Nigeria, was appointed in September at JFK funded by the World Bank. She is the only medically trained anaesthetist for the whole country of 3.5 million people. She recently published an excellent book entitled '*Management of complications in anaesthesia and intensive care.*'



Fig 1 Faculty + delegates

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She has been asked to train 10 new anaesthetic nurses (initially the suggestion was 20) in a year but she really does need at least one if not two more consultant colleagues or she may become overwhelmed by the task. She has already caused some waves in the hospital by insisting that the surgeons provide theatre lists in advance and that the anaesthetic nurses assess all patients pre-operatively on the ward.

She is trying to empower her anaesthetic nurse colleagues in their continuing 'battle' with the surgeons who of course are all medically trained and so are usually not prepared to take advice from anaesthesia providers because they are only nurses. She is also attempting to organise post-operative recovery, effective post-operative analgesia and regular supply of vital anaesthetic drugs. She feels that to improve the standard of anaesthesia all medical students and possibly trainee surgeons should spend at least one month in anaesthesia. She is happy with the 'Glostavent' machine ([www.diamedica.co.uk](http://www.diamedica.co.uk)) provided to JFK in March 2008 as in the past she has worked with its inventor Dr Roger Eltringham in Gloucester.

### Organisation

Dr Keith organised this with Dr Jim Tomarken (Clinton Foundation fellow at JFK) and Garrison Kerwillain (Chair of LANA – Liberian Association of Nurse Anaesthetists). Dr Alex coordinated the lecture programme. A flyer was designed and all attendees from the conference in 2007 whose contact details were known were informed by both email and text. The team arrived in Monrovia with enough T-shirts, lanyards, name badge holders, writing pads and pens for all the delegates and also with a banner which was attached to railings near the main hospital gate (fig 2). Food for lunch on all three days (fig 3), a conference dinner on the first evening and cans of soft drink at 11am every day were organised with the hospital caterer.



Fig 2. Conference banner



Fig 3. Lunch

The conference room was chosen although due to problems with locating keys this did vary from day to day!

### The conference

The opening ceremony occurred in the presence of Dr Moses Pewu, Deputy Director Curative Services, Ministry of Health and Social Welfare. His presence was vital as it gave the meeting more credibility and allowed myself and the LANA chairman, Garrison, to emphasise the importance of anaesthesia and how new trainees and a regular supply of basic anaesthetic drugs and disposable equipment (e.g. spinal needles, IV cannulae, tracheal tubes) are so vital to effective service delivery.

On the first morning the delegates were given an essay to write which they had to hand in by the end of day two. The topic was 'How would you improve the anaesthesia service at your hospital?'

The format each morning was lectures (fig 4) and a quiz using Powerpoint projection on a wall. The quiz topics were based on lectures which had already



Fig 4. Lecture



Fig 5. The quiz

occurred. They consisted of statements with a true or false answer. Delegates were asked to stand up if they thought the answer was true and remain seated if they thought the answer was false (fig 5).



Fig 6. Small group discussion

Questions continued until there was a winner who was then given a prize. The afternoons were dedicated to small group discussions (fig 6) based on the suggestions of Prime International ([www.primeinternational.org.uk](http://www.primeinternational.org.uk)) which seeks to influence attitudes, values, behaviour and communication skills among health professionals in developing countries. The various topics included: 'Why did you come to this meeting?', 'How to get more knowledge and skills', 'What is a good role model for an anaesthetist?', 'Attitudes of a good anaesthetist', 'Teamwork – there is no 'I' in T-E-A-M', 'Draw up a list of essential anaesthetic drugs,'



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'Design an anaesthetic chart,' 'Pre- and Post- operative scenarios'.

The suggestions were written on a chart (fig 7) which was left on the wall for the remainder of the conference.



Fig7. Wall chart

By the end of the third day there was very active participation by many delegates with some interesting and heated discussions. I remember one about 'spinal shock' a term which I have only heard before associated with spinal cord injury. In Liberia this seemed to relate to severe and sometimes fatal hypotension which occurs after a subarachnoid block usually for a caesarean when either atropine and vasopressors were not available or not given appropriately.

All the team gave excellent presentations which were well received by the audience but Dr Stella Eguma with her experience and understanding of West African anaesthesia nurses interacted particularly well with the audience during her lectures.

At the closing ceremony four essay prizes were awarded and three for being the last person standing in each quiz. All delegates received an officially signed attendance certificate, two CDs (kindly donated by Dr Mike Dobson – Oxford) and \$20 travel expenses. Enough copies of 'Safe Anaesthesia' by Lucille Bartholomeuz, to provide one for each delegate, are at present still in a Mercy Ships container in Monrovia docks but will be delivered as soon as possible.

### Summary

The crisis in anaesthesia in Liberia would be helped in the long term by

encouraging medical graduates to consider training as anaesthetists. These anaesthetists would then be able to train a new generation of young anaesthetic nurses who would become, as in most African countries, the backbone of the service. In the short term a way of organising a regular supply chain for the provision of anaesthetic drugs and disposables needs to be found. It is imperative that individual hospitals do some planning and submit their needs well in advance rather than waiting until supplies run out.

Comprehensive training of a sufficient number of young anaesthetic nurses must start as soon as possible if provision of surgical services is also to improve. The standard of training of these anaesthesia providers is important and Dr Stella Eguma needs the backing of at least one more consultant colleague but preferably two. Dr Sarah O'Neill is planning to spend a few days helping Dr Stella with her new trainees prior to her departure on the Mercy Ship in mid December. A rotation of senior trainees in anaesthesiology from the USA or UK would be very helpful. Already Emergency Room Doctors and Paediatricians from the USA do 3-4 week placements at JFK sponsored by HEARTT, co-ordinated from the University of Chicago. It is the brainchild of the President of Liberia's son Dr James Adama Sirleaf MD. Perhaps a similar scheme for anesthesiologists could be set up?

Dr Alex and I are considering returning to Monrovia again in 2009 but we feel that a more useful course might be two days on 'Peri-operative Care.' This would include both pre-operative care and optimisation of the sick patient by surgeons and anaesthetists working in harmony and post operative care by nursing staff. This would be aimed at surgeons, anaesthesia providers and theatre and surgical ward nurses. Proposed additional members of our team would include

surgeons and recovery nurses.

### Postscript

1. Reply from the Minister of Health and Social Welfare to my letter (see website [www.africansmiles.co.uk](http://www.africansmiles.co.uk)) making suggestions concerning the anaesthesia service in Liberia. 'I thank you very much for the recent anaesthesia conference you organized for Liberia; we need more of this type of help. I am copying your comments/suggestions to both Drs. Dahn and McDonald, focal persons concerned with the training of nurse anesthetists. It is hoped that the anaesthesia training program will be made one of the TNIMA schools and provided the needed trainers.'

Walter T. Gwenigale, MD

2. Comments from Dr Stella Eguma at JFK: 'I think the conference was well organized and well received. Thanks for all that you are doing to improve anaesthesia service in Africa. As you can imagine, I'm up to my neck in work – clinical and teaching. The training of nurse anesthetists has finally taken off. I have 12 students. Two of the experienced nurse anaesthetists are helping with the lectures and supervision. Dr. Tomarken, the pharmacist and some doctors are also going to teach. Sarah plans to come in the first 2 weeks of December so it is not too bad so far. The books you shipped down finally got to us yesterday.'

9th Dec. Sarah has been of tremendous help. She has been able to come and talk to the students about 3 times within the last 8 days. The topics she covered were oxygen and CO<sub>2</sub> transport, uptake of inhalational agents, lung function tests, oxygen storage and supply. She covered all the grounds and even made hand-outs but whether they fully understood it all I shall find out when I give the first test just before the Xmas break! The ship sails soon so she will not be able to come out

again but I fully appreciate her contributions. Thank you for the background support and please continue to be there for me to fall back on.'

3. Comments from Garrison Kerwillain, chair of LANA, who felt the conference had three major objectives:

- To build the capacity of Liberian Nurse-anesthetists since in most cases they are working independently in the absence of an anaesthesiologist and the field is also dynamic
- Consolidate themselves so that their appeals to Central Government for improvement in facilities and services can be more forceful
- To organize themselves as a professional body for quality services to humanity

The full text of Garrison's report is available on:

[www.africansmiles.co.uk](http://www.africansmiles.co.uk)