



**Multi-level Training for Healthcare Workers in Surgical and Theatre
Nursing Skills in East, Central and Southern Africa (ECSA) to Achieve
Better Outcomes Following Emergency Surgery**

UROLOGY MODULE

**(19th May to 24th May 2013)
Nairobi Surgical Skills Centre
University of Nairobi, Nairobi, Kenya**

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Background

Mr Bob Lane, Convener & Programme Director for International Affairs at the ASGBI, submitted an application for a grant to the Department of International Development to deliver multi-level training for Healthcare Workers to improve emergency surgical care in COSECSA region and was successful. The pilot Management of Surgical Emergencies (MSE) course delivered in October 2011 consisted of five clinical teaching modules, these being: critical care; general surgery; orthopaedics and trauma; urology and obstetrics. The plan is to deliver 6 courses in the COSECSA region in the next two and half years.

The first course was delivered at Lusaka, Zambia from 22nd February to 2nd March 2013. This was our first visit to Nairobi to deliver a similar course. Once the dates were finalised, I contacted local coordinator Dr Andrew Ndonga, Consultant Surgeon, Nairobi to discuss the urology module. Dr Ndonga very promptly suggested Dr Charles Waihenya's name. I emailed details about the urology module to Dr Waihenya and also requested him to have another local faculty member. Dr Waihenya recommended Dr Maina Samson and therefore I contacted both of them a few times before our departure to keep them informed and also emailed them my February 2013 Lusaka course report. Mr Jaimin Bhatt was supposed to accompany me as a second UK faculty member but due to some problems he could not make it and Mr Bhaskar Somani, Consultant Urologist, Southampton agreed to join me on short notice.

NAIROBI TRIP

Saturday 18th May 2013

We arrived at the Nairobi airport early in the morning. All team members travelled to the hotel Seven Sun Mayfair Nairobi. Mr Lane arranged a meeting to discuss logistics about the course at 2.00pm. Various aspects of the course were discussed and we travelled to the Nairobi Surgical Skill Centre (NSSC) to have a feel of the place. This is a new Surgical Skill Centre situated within Chiromo Campus, University of Nairobi. The centre is located at the School of Anatomy, off Chiromo Lane. Nairobi Surgical Skills Centre was officially inaugurated on 1st November 2012. This is an initiative of the University of Nairobi in partnership with Johnson and Johnson (PTY) Limited and Phillips Healthcare Technologies. We were very impressed with facilities within the skill centre.

Sunday 19th May 2013

All team members left the hotel at 7.30am. Mr Fanus Dreyer and Dr David Ball arrived late on Saturday night. On Sunday we delivered the Training the Trainers course. There were 9 local trainers who attended the course. In the morning Mr Lane gave a presentation on art of lecturing and this was followed by Mr Dreyer's

presentation on assessment in medical education. After lunch a session was done involving role-play for local trainers. At 3 o'clock all trainees arrived for registration. There were 11 trainees. Mr Yogesh Nathdwarawala prepared a questionnaire to assess candidate's operative experience in each module at the time of registration. This was handed over to all trainees. After registration, a presentation on safe surgery was given by Mr Fanus Dreyer. At the end, trainees finished the pre-course MCQ test.



Mr Dreyer, Mr Oshowo and Mr Nathdwarawala outside the NSSC

Laparoscopic simulator in the NSSC

I met Dr Maina Samson and Dr Charles Waihenya during the Training the Trainers session on Sunday. Both agreed to help with the urology module. I briefed them about the content of the module. I was pleased to see that both appeared very keen to deliver this module. Mr Lane had organised for video recording of the whole event with an idea to make a short film for the Global Surgery.

Monday 20th May 2013

We all left the hotel at 7.20am in the morning. Mr David Ball took the lead to run the Critical Care module for 2 days. I went to the lab to check instruments and other material for the urology module. I finished putting everything together by lunch time. In the afternoon, I took the opportunity to visit the national museum.



UK Faculty members setting equipment for respective module

You do get time to eat!



Can you name these birds? (Nairobi National Museum)

Tuesday 21th May 2013

All group members decided to visit the national park in the morning. In the afternoon, Mr Bhaskar Somani, Consultant Urologist from Southampton arrived to help me to deliver urology module. He agreed to deliver the urology module with me on short notice. I sat with him, in the afternoon, and went through the module content and method of delivery. We finished around 7 o'clock and decided to eat dinner at our hotel.

Wednesday 22nd May 2013

We arrived at the skills centre at 7.45am. Due to limited space we decided to deliver our presentation on a computer as the group was small. There were a total of 14 candidates for the course and they were divided in to 3 groups. Dr Waihenya and Dr Samson arrived at 8 o'clock. After a brief introduction of the module I talked about troubleshooting with urethral catheter. Mr Somani gave a talk on acute scrotum. After these two talks we did our first practical sessions. Mr Somani showed testicular fixation on one station and I took candidates for a suprapubic cystostomy. I used Limbs and Things suprapubic model to deliver this part with some modification. For the acute scrotum Mr Somani used pig's testicles. He simulated scrotal skin by using synthetic skin. After half an hour candidates were swapped. After a short break, I delivered a short presentation on ureteric injury and Mr Somani talked on bladder and urethral injury. He also delivered a short presentation on priapism. For the practical session we decided to use pig's bladder and the ureter was stimulated by using a long balloon. Mr Somani showed ureteroureterostomy using balloons. I demonstrated extravesical ureteric reimplantation and intravesical ureteric implantation on a pig's bladder. Candidates were given the opportunity to perform

reimplantation and bladder repair. Dr Waihenya and Dr Samson both observed practical sessions and provided input from time to time. In addition, participants were asked to perform a circumcision on a model given by Limbs and Things. We collected feedback on this model. At the end of the session a repeat MCQ test was done. In addition, we collected feedback on the modules. During lunch, I had a discussion with Dr Waihenya and Dr Samson. I suggested they deliver one talk on Thursday – both agreed. We gave them all presentation and module handbook on a memory stick. We came back to hotel late afternoon. After coming back we marked the pre course MCQ's and MCQ's from Wednesday.



Participants performing suprapubic cystostomy



Mr Somani supervising testicular fixation

Thursday 23rd May 2013

We reached before 8.00am at the skill centre. Dr Waihenya and Dr Samson arrived on time. Dr Waihenya agreed to do a talk on acute scrotum and Dr Samson was happy to present the talk on ureteric injury. We started on time. After the first two talks on troubleshooting with urethral catheterisation and acute scrotum, a practical session was performed. I suggested Dr Samson to take the lead on the practical session on suprapubic cystostomy and Mr Waihenya was supported by Mr Somani to deliver practical session on acute scrotum. Both local faculty members were very keen. Dr Samson delivered the presentation on ureteric injuries. Once again both local faculty members were given the opportunity to lead the practical session on bladder repair and ureteric repair. In addition, participants once more performed circumcision on a model and we collected feedback. In the afternoon, Mr Somani and I, along with local faculty, sat down to fill out the assessment form and marked the MCQ's. For the general surgical module faculty members were using a pig to demonstrate laparotomy. I, therefore, requested Mr Gartell to allow us to have a kidney with ureter. Mr Russell Lock very kindly dissected out a kidney with long ureter. I was very keen to use ureter to demonstrate ureteric reimplantation.



Dr Waihenya talking about ureteric trauma and demonstrating ureteric reimplantation

Friday 25th May 2013

We arrived at the skills centre at 7.40am. Surprisingly traffic wasn't that bad on Friday morning. Dr Waihenya was already there at the skill centre. On Friday we had five candidates. We repeated the module in a similar way and Dr Waihenya and Dr Samson delivered a presentation on acute scrotum and ureteric injury respectively. We used a pig's ureter with kidney for ureteric reimplantation instead of balloon. Candidates enjoyed the practical session. After lunch, we sat down to complete the assessment forms and MCQ marking. We were all impressed with the knowledge and skills of the candidates. There were a few very outstanding trainees. In the afternoon, we cleaned the area and packed all urology accessories in a box. I handed everything over to Rose. Mr Somani left in the afternoon after lunch. I helped Yogesh to pack his stuff from the orthopaedic module. Around 4 o'clock we all gathered for a post course meeting and presentation. Mr Lane thanked the local faculty and candidates. Candidates were given a certificate of completion. We agreed to have a team brief meeting at the hotel at 6 o'clock. All UK faculty members gathered at 6 o'clock and feedback from each module except critical care was given to Mr Lane. At the feedback session concern was raised, as there was a lack of a local orthopaedic trainer. Rest of the modules were very well supported by the local faculty.



Faculty members at the Certificate of Completion Ceremony

What went well?

Course

- Mr Lane once again showed his strong leadership, commitment, support and organisational skills.
- Very modern facilities at the NSSC to run a course.
- Excellent support from Rose and her team, Manager NSSC.
- Catering, transport and hotel facilities were good
- Gathering information on operative experience of trainees at the time of registration was useful for targeted teaching.
- Majority of participants had read the course manual as it was emailed to all

Urology module

- Good communication between UK and local faculty members prior to the course.
- Outstanding support from local urology faculty (Dr Waihenya and Dr Samson) for all 3 days.
- Equipment for module delivery was satisfactory.
- Local urology faculty members attended the Training the Trainer course on Sunday.
- Part of the urology module was delivered by local faculty members on Thursday and Friday.
- Circumcision model worked well.

What could have been better?

Course

- Lack of trainees and trainers (orthopaedic). Introduction of a nominal charge for trainees will commit them for the course.
- Smell from the dissection lab was unpleasant.
- Debriefing on Tuesday from the Critical Care team about delegates would be useful.
- It would be useful to have trainees name and emails prior to the course and this should be passed to all faculty members. If necessary powerpoint presentations can be emailed to all trainees.
- Dr Andrew Ndonga, local coordinator, had an accident and could not attend the full course. His input was missed throughout the course.

Urology module

- Room to deliver urology module was not ideal.
- More tables to practice practical parts.
- To consider emailing powerpoint presentation to trainees to maximise time for practical session.
- Analysis of feedback suggests that delegates would like to have more time for practical's and therefore in the next course we plan to reduce lecture time.
- Outcome from pre and post course MCQs showed general improvement but was variable and a further look at the MCQs is needed.

Acknowledgements

I am thankful to Mr Bob Lane, Convener & Programme Director for International Affairs of ASGBI, for his continued guidance and to Dr Andrew Ndonga for tireless efforts in facilitating this visit. I could not have done without the excellent support from Mr Bhaskar Somani.

I would like to express my sincere appreciation to Dr Charles Waihenya and Dr Maina Samson. I wish to extend a special thanks to Rose, Manager, Nairobi Surgical Skills Centre.

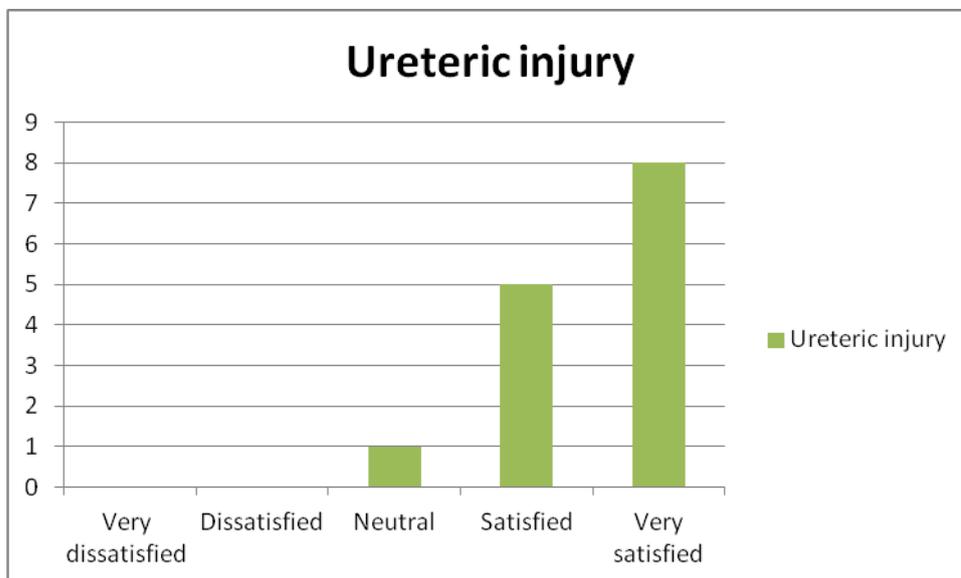
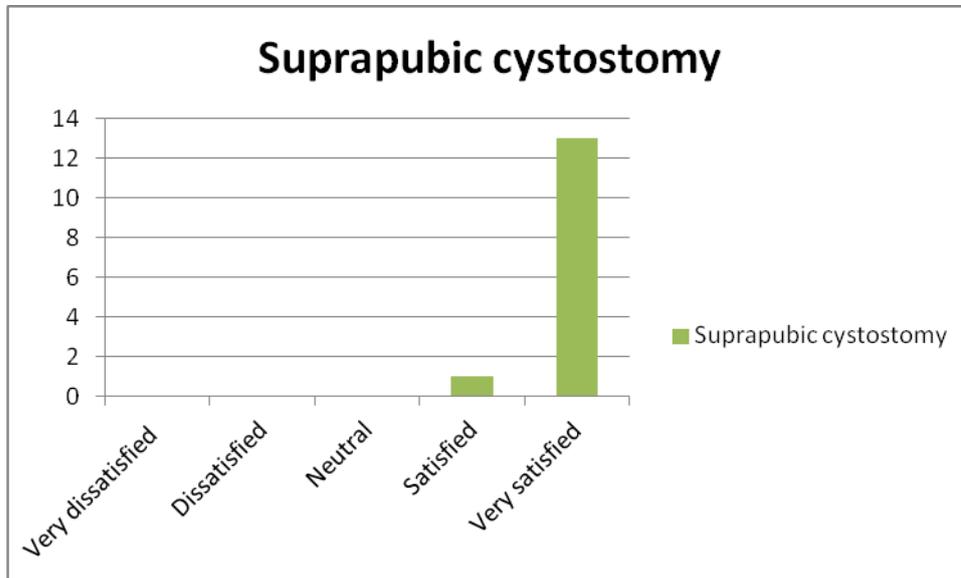
I would like to thank Mr Nick Gerolemou, Marketing Manager, Limbs & Things Ltd, Bristol, UK for providing models for circumcision.

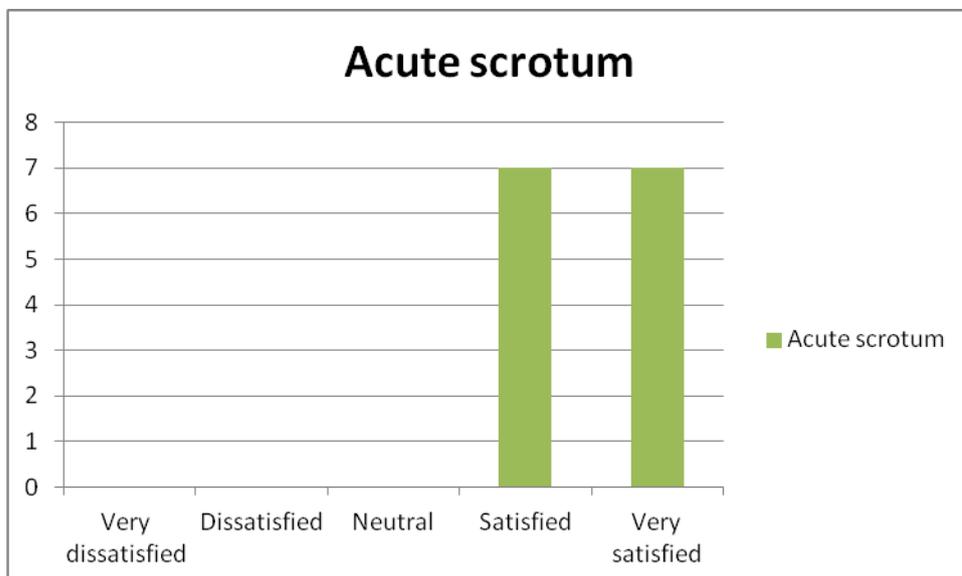
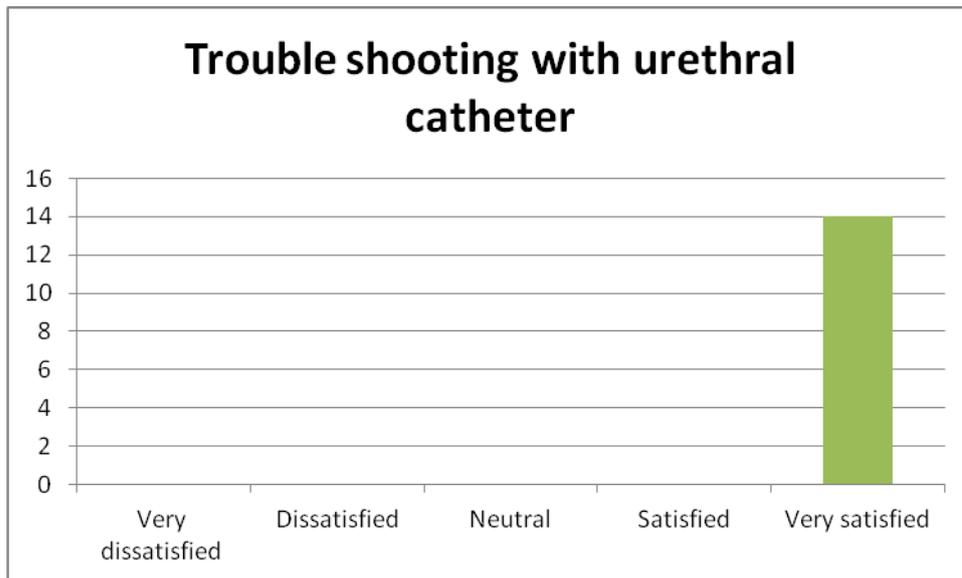
I am grateful to Mr Ru MacDonagh Chairman, UROLINK, as well as BAUS for their continued support.

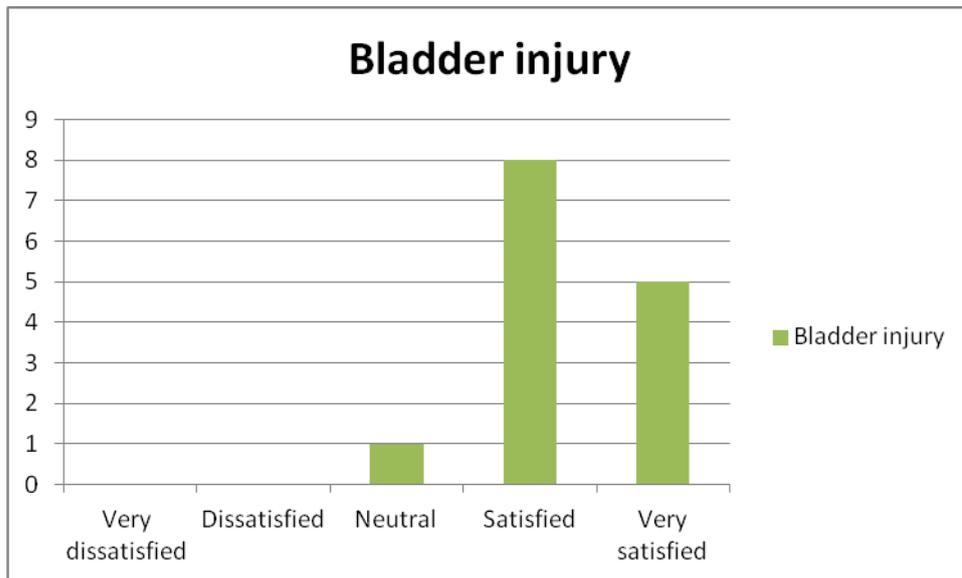
Funding

ASGBI (part self)

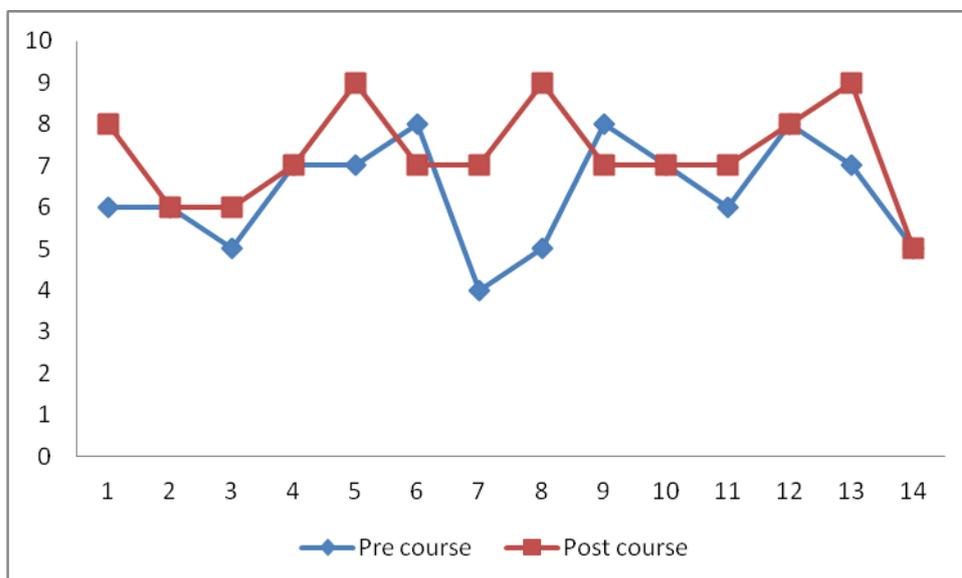
Feedback







Pre and post course MCQ outcome



What was very good?

Practical session, having hands on
Repair of ureter different options
Basics about catheterisation - precautions
All topics very good
Demonstration station on repair viz bladder, ureter
Good participation by local faculty
Time conscious
Very practical
Practical
The instructors were very co-operative
The hands on was absolutely impressive
Practical
Practical sessions allow for trainee participation
Opportunity for hands on training
The practicality of it
Trouble shooting with urethral catheter
Less talk more practical's

What could have been better

Some topics were rushed through
Needed **more time** for both theory/practical
Time for more practice
Urology could take also whole day
Detailed practical presentation
More time
More time for practical's
Slightly **more time**
Give also time to the theoretical aspects
More time allocated for urology thus more time to practice and understand
More time
More station with individual practice and supervision
ureteric injury (needs **more time**)
More time for the course

Other comments

Good to learn different ways to perform procedures

Overall very important/hands on session, every trainee should have a go

This course should be repeatable for trainees

This is a great course

Awesome

An advance urological course may be useful

Pleasure to have been involved in the course

Great tutorials

Grateful

Very well done