COURSE REPORT

JIMMA, ETHIOPIA

17th – 21st March 2014

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COSECSA Oxford Orthopaedic Link (COOL)
This Primary Trauma Care course is part of a project funded through the Health Partnership Scheme, which is funded by the UK Department for International Development (DFID) for the benefit of the UK and partner country health sectors and managed by the Tropical Health Education Trust (THET). The project is called the COSECSA Oxford Orthopaedic Link (COOL). More information is available at www.ndorms.ox.ac.uk/cool.php.

Report on the PTC Foundation Course Jimma, March 2014

Purpose of the visit and executive summary

This visit was the first to Jimma, Ethiopia as part of the PTC/COOL project, to introduce a 2-1-2 PTC programme. Previously PTC courses have been run in Addis Ababa in 2009 and 2013. The anticipated plan thereafter is for further dissemination of courses to other centres in Ethiopia.

Background

Ethiopia is one of the oldest countries in the world and with over 93 million people is the worlds most populous land locked countries and Africa's second-most populous nation. According to the WHO Ethiopia has only 2.6 medical doctors per 100,000 people, and a total of 17 anaesthesiologists.

Ethiopia' main health problems are communicable diseases caused by poor sanitation and malnutrition which is exacerbated by the shortage of trained healthcare workers and facilities. Access to healthcare is much better in the cities, which is reflected in the life expectancy, which is 53 compared to 48 in rural areas. Access to clean water is also greater in the city with 81% having access compared to 11% in rural areas. Trauma is a major contributor to morbidity and mortality however data collection is limited and much is underreported, so exact mortality figures are difficult to establish.

In 1999 trauma was one of the most common reasons to visit the casualty department of Black Lion Hospital in Addis Ababa (the national referral hospital), representing 25% and 62% of the surgical and orthopaedic admissions respectively. One data report suggested that 34% of the first emergency visits were related to road traffic accidents. The majority of the patients were in the age groups of 15-44 years. Pedestrians are especially vulnerable to accidents, as well as men working in building construction, where weak wooden scaffolding is usual. Allegedly in Addis every day six people die in road traffic accidents alone. Some of the contributing factors include poor ambulance services, refusal of hospitals to accept patients and poor resuscitation facilities at some hospitals.

Ethiopia has the highest death rate per 10,000 vehicles per year of Africa with statistics varying between 114 and 180 deaths/10,000 vehicles annually. This compares very unfavourably with countries like Zimbabwe or South Africa each with 17 deaths/10,000 vehicles/year.

Jimma is the largest city in southwest Ethiopia with a population of over 200,000 people. The hospital is the largest in Southwest Ethiopia with the only trauma surgery service, therefore serving a population of over 14 million people, the majority of which live in rural communitites. However the facilities in Jimma are very different to those in Addis Ababa. There is no accident and emergency department or resuscitation room, but an Emergency OPD where patients arrive and are seen in order of arrival, not on a triaged basis. This is covered by junior interns and residents

and there is no anaesthetic input to emergency trauma admissions. There is Xray but as yet no CT scanning available.

Many of the patients presenting in Jimma have travelled for hours or in some cases days to the hospital, mostly on public transport. Trauma from road accidents is very common as the roads in the surrounding area are dusty dirt tracks in many cases which makes travelling during the rainy season particularly treacherous, especially by motorbike when helmets are very seldom worn. Although exact data is not available, other common trauma cases include head injuries from falls, assault with machete or blunt instruments and occupational injuries from working on rural farms. During our time in Jimma a teenager travelled 48 hours from Gambella to Jimma after being attacked by a crocodile whilst he and his brother were washing in a river. He has had several operations since then to try and save his leg.

The hospital has one trauma surgeon, from the Swiss GoStar charity and one trauma theatre. There is limited running water in the hospital, inadequate equipment and currently no blood bank. The trauma ward has the capacity for 50 patients with additional patients lining the corridor and emergency outpatient department. It is always full to capacity. From discussions with the trauma surgeon in Jimma, there are on average 2-3 trauma admissions a day with the most common injuries being femur fracture, tibia fracture and forearm fractures. Sadly, many of the patients with severe head and spinal injuries die due to lack of resources.

Currently, a larger hospital is being built in Jimma, which, with its better facilities and trained personnel will hopefully help to improve patient care.

Key staff involved in planning and co-ordinating

Following the course in Addis Ababa in 2013 plans were put in place by Dr James de Coucy and Dr Phil McDonald (Operation Smile Medical Director) for a PTC course to run in March 2014. This would coincide with a visit from Operation Smile and additional help for the course and faculty would come from the Operation Smile Visiting Lecturer, Dr Graeme Harrington, based in Jimma for 6 months. In addition to Graeme and Phil, Dr Allie Green (KSS Education Fellow) would also be out in Jimma at this time working on the future structure of the Visiting Lecturer programme and would be able to join the faculty. Dr Michael Schmelz a Swiss trauma surgeon working in Jimma for 3 months with the charity GoStar also agreed to help. Unfortunately, none of the instructors from the previous Addis courses were able to help as course directors and so after discussion between James DeCourcy and Phil McDonald, Allie Green was given the role as course director. This was due to Allie having been to Jimma before as part of the Visiting Lecturer programme and so had contacts/local knowledge, and also because she would be in Jimma for 2 weeks prior to the course to organize and prepare. In addition to the above, Dr Mel Cockroft, an anaesthetic trainee from Cheltenham joined the faculty.

Several weeks of email correspondence followed and Allie and James were able to meet to discuss through the course programme, as none of the faculty had taught on the PTC course before (despite between them being APLS, ALS and PHTLS instructors). James was able to provide all the course information, slides from Addis and invaluable tips on how to run the course in Ethiopia and beyond. Additional preparation before leaving for Jimma included producing CDs and printing all of the paperwork and manuals etc as it is difficult to get this done in Jimma. A visa card was also arranged to pay for course expenses (this would be for cash withdrawal only as nowhere accepts card payment in Jimma)

Allie flew to Jimma on March 2nd 2014 and joined Graeme and Michael who are currently based and working in Jimma. There is a daily trauma meeting for all the surgical seniors, residents, interns and medical students and so this was targeted as our way of advertising the course. Graeme and Michael had been mentioning the course daily and on Allie's arrival posters were produced and sign up sheets were passed around the meeting. The trauma meeting was attended by Allie, Michael and Graeme every day in the two weeks prior to the course and once all the spaces were filled, the lists were sent to the senior surgeons Drs Danil and Samson for confirmation that the juniors could have time away from clinical duties. It was decided that the first course would be aimed at seniors and residents and the second course would be aimed at the interns and health officers, so that the most senior clinicians could attend the instructor day.

In addition to the surgeons, we wanted to recruit anaesthetists to the course. Dr Yemane and Dr Girma, the Anaesthesiologists in Jimma coordinated the recruitment of anaesthetists to ensure that they were able to participate in both of the courses.

On Allies arrival and with the help of Graeme and Andreas Wieser (a German microbiologist working out in Jimma for 1 year) venues were found for the course. After reading the reports of 2009 and 2013 it was clear that timing keeping was an issue and so we tried to arrange the timetables and venues so that there was minimal disruption. The lectures were delivered in a conference room, the skills in the anatomy lab, and the scenarios in the one of the classrooms. All of these were easily booked free of charge through local staff and by letters written by us to the Dean of Jimma University, Professor Abraham. Lunch and refreshments for the course were arranged through the staff lounge, which was directly below the conference room, to ensure time was not lost moving to different locations. We decided that to break up the week we would have the instructor day at the Honeyland Hotel, where Allie and Mel were staying. This was easily arranged with free use of a large room.

All equipment was sourced locally, including 2 (live!) sheep that were bought by Allie through a local farmer for use in the surgical airway and chest drain skills stations. Thanks goes to Dr Andreas Wieser for 'preparing' them for us. The microbiology department also benefited from the sheep for their blood agar plates and the faculty were well fed. Thanks also goes to the Operation Smile team who provided us with the equipment for the skills stations (airway and chest drain). We only used what is available locally but by using the Operation Smile equipment we were not taking from an already limited supply.

Course participants

The participants for the first course were a mixture of senior surgeons, residents, anaesthesiologists and nurse anaesthetists. Although the anaesthetists do not have extensive involvement in the initial management of trauma, the aim was to help improve the knowledge, skills and communication within the surgical and anaesthetic departments so that the management of trauma patients in theatre could be improved. It would also provide instructors skilled in airway management for future courses. The second course was attended by surgical residents, interns, public health officers and anaesthetists. The health officers in Ethiopia are similar to 'physician assistants' and work in rural medical centres, physicians are really only found in hospitals. Participants are listed below. On course one we lost 2 candidates to clinical commitments and on course two we lost 3 on the second day. On the instructor day we trained 16, of which 13 taught either a lecture, workshop, skill or scenario on course 2. The difficulty was getting people to attend for the full week as clinical duties needed to be covered. On course two, the instructors came for their allocated teaching session but were not able to stay for the whole course.

Course instructors

Dr Allie Green, Education Fellow in Anaesthetics, Brighton, UK (Course Director)
Dr Michael Schmelz, Trauma Surgeon, Basel, Switzerland
Dr Phil McDonald, Consultant Anaesthetist, Chichester, UK
Dr Graeme Harrington, Anaesthetic registrar KSS deanery & current Visiting Lecturer, Jimma, Ethiopia
Dr Mel Cockroft, Anaesthetic Registrar, Cheltenham, UK

Although only Allie and Phil had worked together before, the team worked extremely well together. The faculty were contacted by Allie before the course to ensure lecture allocations reflected their interests and skills. We were very fortunate that four of the five faculty members had worked or were currently working in Jimma, which added to the credibility of the course, as we knew many of the candidates, the local set up and equipment availability. We were also very lucky to have Michael with us for the first course, as the only trauma surgeon in Jimma he is a fantastic source of local knowledge and is well respected by the surgical trainees.

All five of the faculty are ATLS providers, Michael being a PHTLS instructor and Phil and Allie APLS instructors. None of the team had experience teaching on or running a PTC course.

In addition to the above on course one we had the help of two German medical students from Munich University, Maximillian Rauch and Sebastian Fuchs who played fantastic trauma patients in our scenarios.

Details of activities and professional aspects of the visit

Phil and Mel arrived on Sunday 16th March, the day before the course. Although we had several changes of candidates in the preceding days, everything was arranged for the course prior to their arrival. We had a meeting at the Honeyland hotel on the Sunday evening to talk through scenarios and upload all the presentations onto one computer.

As already mentioned all except Mel knew Jimma hospital well and so it was easy to orientate ourselves on the Monday morning. The projector and some airway equipment was provided by the anaesthetic department and the remainder by Operation Smile. We therefore did not have to bring any equipment with us into Ethiopia as this had caused problems at customs on the previous course in Addis 2013.

Allie organized the timetable allocations so that she was free to ensure the refreshments arrived on time (which was variable!), round up latecomers and to sort any last minute problems such as changes to room allocations (the room for the scenarios was double booked for course one!). Although this added stress to Allie, one of the Seniors remarked “this is Africa, we are used to it”!

In the evenings after the course we met for dinner at the Honeyland Hotel to debrief the day and talk through the candidates to highlight any who may need extra support, and those who could be potential instructors.

Due to clinical commitments, Michael and Phil could only teach on course one, so the instructor day was modified for 3 instructors, but it worked well with great feedback from the candidates.

Phil left on Friday 21st March, Mel and Allie on Monday 24th. Before we left, Mel was given a tour of the hospital and attended a surgical and ICU ward round. We also showed her around Jimma town and went Hyena spotting! Graeme will remain in Jimma until August 2014 and Michael until April 2014.

Contents of the Primary Trauma Care course

The participants in the first course were a mix of Anesthesiology and Surgical seniors, residents and anaesthetists. We are grateful to Dr Danil, Head of the Surgical department for allowing the surgical residents to take time off their clinical duties and allowing them to participate for the majority of the week. Unfortunately, due to clinical commitments Dr Danil could not attend the course, but Dr Samson the previous surgical lead for Jimma Hospital, attended course one and the instructor course.

Course 1: Monday 17th – Tuesday 18th March 2014

Participants (all work at Jimma University Specialized Hospital)

No.	Name	M/F	Grade	Specialty	MCQ 1	MCQ 2
1	Badhaassa Beyene	M	Resident	Surgery	23	28
2	Gemechu Lemi	M	Resident	Surgery	24	27
3	Samson Esseye	M	Senior	Surgery	27	29
4	Mengistu Alemu	M	Anaesthetist	Anaesthetics	23	29
5	Zemenu Muluken	M	Anaesthetist	Anaesthetics	15	20
6	Nega Desalegn	M	Anaesthetist	Anaesthetics	22	27
7	Biruk Mengist Abebe	M	Anaesthetist	Anaesthetics	16	21
8	Million Tesfaye	M	Anaesthetist	Anaesthetics	19	26
9	Girma Woldearegay	M	Senior	Anaesthetics	18	25
10	Suleiman Kedir	M	Resident	Surgery	25	23
11	Dereje Dugasa	M	Resident	Surgery	22	
12	Lidya Gemechu	F	Resident	Surgery	19	26
13	Zenaw Amare	M	Resident	Surgery	26	27
14	Esayas Mohammed	M	Resident	Surgery	25	29
15	Fikadu Negash	M	Resident	Surgery	21	24
16	Biruk Abebe	M	Resident	Surgery	23	
17	Sintayehu Shanko	M	Resident	Surgery	21	27
18	Samuel Tesfaye	M	Resident	Surgery	25	28
19	Tatek Girma	M	Resident	Surgery	23	26
20	Ashebir Birhanu	M	Resident	Surgery	22	22

No. 11 had to leave on day one but rejoined Course two. No.16 had to leave on day two.

Day 1 timetable

Monday 17th March			
9.00	15’	Welcome and Introductions	Allie

9.15	25’	PTC overview	Allie
9.40	30’	Local trauma perspective and MCQ	Michael/Gemechu
10.10	30’	ABCDE of Trauma and Primary survey	All (scenario)
10.40	10’	BREAK	
10.50	30’	Airway and Breathing	Mel
11.20	35’	Circulation and Shock	Phil
11.50	30’	Chest Injuries	Michael
12.20	45’	LUNCH BREAK	
13.00		*Skill stations*	
	(25’)	*Basic / Advanced Airway*	Mel/Allie
	(25’)	*Cervical spine / Logroll*	Graeme
	(25’)	*Chest drains & surgical airway*	Michael/Phil
14.15	10’	Break	
14.25	60’	Scenario practice (3 groups)	all
15.25	45’	Abdominal and Limb injuries	Michael
16.15	5’	Overview and summary	Allie

The course timetable was modified from that used by Dr James de Courcy during the Addis course 2013. We were a little late starting as we had to register all of the candidates, so the MCQ was completed as and when they arrived, and any latecomers completed it during the coffee break. This allowed us to make up the time well and the rest of the day ran to time. Manuals were only given out on completion of the PTC paperwork and MCQ. Name badges were given to all the candidates with group 1, 2 or 3 allocated to them at random for the skills and scenario sessions.

It is clear from working in Jimma that the main method of teaching is by presentation and so we wanted to ensure we limited traditional ‘lecture style’ teaching as much as possible. We used a scenario to teach the ABCDE of trauma and ensured a brief discussion of recent cases after each lecture. Mel used a manikin to perform airway maneuvers during the airway and breathing lecture and coped very well with an unplanned power failure during her presentation! Phil used empty water bottles to explain blood loss and shock. This visual aid was well received and prompted much discussion.

The timetable also worked well with our room changes. The morning was spent in the conference room and then after the lunch break we moved to a different building to the anatomy lab and classroom for the scenarios (which changed last minute!) and abdominal and limb injuries lecture. With faculty members staying with the group during breaks we were able to minimize losing candidates throughout the day!

Day 2 timetable

Tuesday 18th March			
9.00	40’	Head and Spinal injuries	Graeme
9.40	30’	Trauma in Children and Pregnancy	Phil

10.10	30’	Burns	Michael
10.40	15’	BREAK	
10.55	80’	Workshops *Analgesia* *Transportation* *Triage scenarios* *Neurological assessment*	Allie Michael Graeme Phil/Mel
12.15	30’	Secondary survey (demonstration/discussion)	All
12.45	40’	LUNCH BREAK	
13.25	30’	Disaster management (discussion)	Michael
13.55	80’	Scenarios (in 3 groups)	all
15.15	10’	Break	
15.25	15’	Multiple choice paper review	all
15.40	40’	Summary. Feedback and Evaluation	all
16.20	15’	Close and discussion/planning of instructor day	Allie

The day ran well to time. The first three lectures of the day produced much discussion, as this is a lot of new information for some and we sadly had to cut short discussions to keep to time. Head injury is a major cause of mortality in Jimma and so we tried to use local case scenarios as much as possible to illustrate what can be done in their set up. Perhaps for future courses there should be more time allocated for these first 3 lectures.

Again, the secondary survey was performed as a demonstration, which was well received and prompted more discussion. It was great to see all specialties and grades getting involved with the discussion.

After the lunch break we again moved location to do the scenarios and disaster management discussion. Michael, as a pre-hospital medicine expert was the best person to do this and stimulated a great discussion of what would happen if a plane crashed at Jimma airport. We were able to use a white board for this but it could have easily been run without. The scenarios from the manual were modified by us to reflect recent cases seen by us in Jimma such as a crocodile bite and head injuries from climbing trees to collect honey. The participants stayed in their same 3 groups from day 1 but worked with a different instructor during the scenarios.

Instructor Day – Wednesday 19th March 2014



The day began with an introduction, paperwork filling and discussion of what the participants would be doing later in the day. It started well on time and although we initially had a few technical problems with the computer and projector (taken to the Honeyland Hotel from the anaesthesia dept) we improvised well!

The day was attended by 15 of those who had attended the first two days, with the addition of an Anaesthesiology Senior, Dr Yemane who had been on the PTC course in Addis 2009 and wanted a refresher before teaching on course 2. The organisers' aim being that these doctors would attend the instructor day and then the succeeding two day PTC course. Some of the residents who attended had been up all night operating prior to attending and should be commended for their enthusiasm and high degree of professionalism for the course.

We advised the candidates that they would be giving a 5 minute presentation and leading a discussion group later in the day so they had some time to prepare. We decided that the presentation would be on 'teach us something we didn't know about Ethiopia' and the discussion group would be on disaster management, as this had sparked so much interest the previous day. They didn't disappoint, with some preparing notes and powerpoint presentations over the break times and we all learned a lot about Ethiopian culture, coffee and the history of Jimma!

The groups were divided into 3 and we ran each of the 4 workshops simultaneously, keeping the same group for each. Although ideally it would have been good to move instructors around the groups, we were only 3 and by staying with each group we built up a rapport and had a lot of fun along the way.

At the end of the day 13 of the 16 attending stated they would be able to help with some aspect of teaching on the following two days, however because of clinical duties none could commit to the whole of course 2. Lectures/skills/workshops & scenarios were allocated accordingly.

Participants in the Instructor course

No.	Name	M/F	Grade	Specialty
1	Tatek Girma	M	Resident	Surgery
2	Lidya Gemechu	F	Resident	Surgery
3	Suleiman Kedir	M	Resident	Surgery
4	Girma Woldearegay	M	Senior	Anaesthetics
5	Sintayehu Shanko	M	Resident	Surgery
6	Zenaw Amare	M	Resident	Surgery
7	Gemechu Lemi	M	Resident	Surgery
8	Esayas Mohammed	M	Resident	Surgery
9	Badhaassa Beyene	M	Resident	Surgery
10	Yemane Wondafrash	M	Senior	Anaesthetics
11	Samson Esseye	M	Senior	Surgery
12	Biruk Mengist Abebe	M	Anaesthetist	Anaesthetics
13	Mengistu Alemu	M	Anaesthetist	Anaesthetics
14	Million Tesfaye	M	Anaesthetist	Anaesthetics
15	Nega Desalegn	M	Anaesthetist	Anaesthetics
16	Samuel Tesfaye	M	Resident	Surgery

No. 10 Dr Yemane was an additional candidate who had not attended course 1 on this occasion but in Addis 2009.

Instructor day timetable

Wednesday 5th June – Instructor Day			
0900	5 minutes	Introduction	Allie
0905	15 minutes	How adults learn	Graeme
0920	15 minutes	Asking questions	Graeme
0935	25 minutes	Feedback	Mel

1000	40 minutes	*How to give presentations* General introduction Lecture	 Allie Allie
1040	15 minutes	BREAK	
1055	60 minutes	Discussion group Teaching a skill Scenario	Mel Allie Graeme
1155	10 minutes	Preparation for workshops	
1205	40 minutes	Workshops 1 (3 groups) Scenarios	all
1245	40 minutes	LUNCH BREAK	
1325	40+40+40 minutes	Workshops 2 (3 groups) Skills, presentations, discussion groups.	all
1525	10 minutes	BREAK	
1535	60 minutes	Running PTC Courses and discussion about future courses Where to go from here (Discussion group)	Allie
1635		Evaluation and Feedback, Certificate presentations, (planning of tomorrow's course)	Allie

Course 2: Thursday 20th – Friday 21st March 2014

Participants (all work at Jimma University Specialized Hospital)

No.	Name	M/F	Grade	Specialty	MCQ 1	MCQ 2
1	Yadani Michael	F	Resident	Surgery	22	25
2	Nigat Tadesse	F	Anaesthetist	Anaesthetics	19	22
3	Bayu Sewunet	M	Resident	Surgery	28	29
4	Tigist Teferawold Michael	F	Anaesthetist	Anaesthetics	21	26
5	Chala Kenenisa	M	HO-I	Public Health	17	25
6	Derese Disasa	M	MI	Surgery	22	25
7	Dawit Mekonnen	M	MI	Surgery	23	22
8	Tsigereda Baby	F	MI	Surgery	22	25
9	Fikir Tesfaw	M	MI	Surgery	21	25
10	Awoke Wodajo	M	MI	Surgery	19	25
11	Bikila Lemi	M	MI	Surgery	18	27
12	Abdureshid Kedir	M	MI	Surgery	19	24
13	Derebe Nigussie	M	HO-I	Public Health	17	23
14	Menur Birhanu	M	Student	Surgery	9	
15	Mebratu Bekele	M	HO-I	Public Health	16	
16	Melese Asfaw	M	HO-I	Public Health	17	19
17	Sisay Bibaba	M	Resident	Surgery	26	28
18	Elyas Segni	M	Resident	Surgery	23	
19	Dereje Dugasa	M	Resident	Surgery	22	26

No.s 14, 15, & 18 had to leave the course on the afternoon of day 2 due to clinical duties.

Thursday 20th March			
9.00	15'	Welcome and Introductions	Allie
9.15	25'	PTC overview	Allie
9.40	30'	Local trauma perspective and MCQ	Gemechu
10.10	30'	ABCDE of Trauma and Primary survey	Gemechu/Yemane (scenario)
10.40	10'	BREAK	
10.50	30'	Airway and Breathing	Mengistu & Biruk

11.20	35’	Circulation and Shock	Yemane
11.50	30’	Chest Injuries	Gemechu
12.20	45’	LUNCH BREAK	
13.00		*Skill stations*	
	(25’)	*Basic / Advanced Airway*	Mengistu & Biruk
	(25’)	*Cervical spine / Logroll*	Esayas & Badhasa
	(25’)	*Chest drains & surgical airway*	Samuel
14.15	10’	Break	
14.25	60’	Scenario practice (3 groups)	Mengistu/Biruk/esayas/ Badhasa
15.25	45’	Abdominal and Limb injuries	Badhasa
16.15	5’	Overview and summary	Allie

Friday 21st March			
9.00	40’	Head and Spinal injuries	Badhasa
9.40	30’	Trauma in Children and Pregnancy	Tatek
10.10	30’	Burns	Suleiman
10.40	15’	BREAK	
10.55	80’	Workshops *Analgesia* *Transportation* *Triage scenarios* *Neurological assessment*	Girma Nega Suleiman Million
12.15	30’	Secondary survey (demonstration/discussion)	Million/ Nega
12.45	40’	LUNCH BREAK	
13.25	30’	Disaster management (discussion)	Lidya
13.55	80’	Scenarios (in 3 groups)	Lidya/Million/Nega/Suleiman
15.15	10’	Break	
15.25	15’	Multiple choice paper review	all
15.40	40’	Summary. Feedback and Evaluation	Allie/Lidya/Suleiman

Unfortunately none of the instructors could participate for the whole of course 2, which Allie had wanted so that someone would ‘shadow’ as the course director. However, the new instructors taught the course brilliantly. Allie sent text messages the night before to ensure there were no problems with the course slides and to agree timings as some had prepared or adapted the slides for their presentation and so needed to come early to upload them onto our ‘master’ computer. Each of the instructors should be commended on their professional approach and for teaching some skills that at the beginning of the week they had only read about. Dr Esayas had never been shown how to do a log roll before, but by course two he was teaching his junior colleagues with confidence.

Allie gave the introductory lecture and helped with timings and logistics for the day to keep it running smoothly with the arrival of each new instructor, but as UK instructors we did not have to deliver any of the teaching ourselves. On the morning of the second day one of the residents, Dr Zenaw had been up all night operating and so couldn’t make it, so one of his colleagues stepped in at short notice. It was great to see how enthused and committed they all were to the course and we thank them all for making course two so easy for us!

Summary of multiple choice questionnaire scores before and after the course (score out of 30)

See tables above for detailed information: mean overall changes were:

Course 1: Pre-course mean score 22 (range 15-27). Post-course mean score 25.7 (range 20-29).

Course 2: Pre-course mean score 20.1 (range 9-28). Post-course mean score 24.75 (range 19-29).

Feedback

After each of the two courses a session of feedback was held, with very positive comments and much enthusiasm. Many remarked that this training should be available for all doctors and public health officers in training in Jimma. At a meeting Allie attended at the end of the week with Dr Danil, head of surgery, he too suggested that the course be incorporated into their curriculum.

First Course Feedback

Best part of the course?	What would you change?
Not being patronising	More time for practical sessions
Relevant to our set-up in Jimma	More updates on pain management
Short, precise	Repetition (during first day)
The demonstrations	None, keep on like this
The lectures	Add another day
The scenarios	
Not being boring!	
Everything was best!	
Scenarios and your devotion to the training	
Scenarios practice	
Skills stations and demonstrations	
I am able to improve some techniques in trauma care	
Disaster management discussion	
The instructors were very friendly	
Slide presentations	

Instructor Course Feedback

Best part of the course?	What would you change?
Lots of fun	I am happy with what I am trained
Giving feedback and running discussions	Keep up the same way
Discussions and presentation	I'm not sure, everything was perfect for me! Please keep on
All workshops	It is good, keep on doing so
It showed me how to teach somebody else about something	Adapt to the real environment where you practice
Knowledge and skill transfer	Longer time for instructors course
The workshop part	Add more time for skills stations
Teaching skills	It is a very nice course
Scenario and discussion groups	
The lectures were well organised and delivered superbly	
Well organised methods of teaching	

How to handle adult learners	
Simple, effective, interesting	
Feedback and adult learning	
Everything!	

Second Course Feedback

Best part of the course?	What would you change?
It is really good training and changed my insight on how to approach trauma patients	Discuss our real set up where resources are inadequate
Lectures and practice	More discussion on scenarios
All are the best. Continue	More time for pain management
Scenarios practice	I don't want to change anything
Workshops	Invite the medical director to explain about triage
You were diligent	Basic scrience sessions too short
Primary Survey	
Scenarios and special trauma cases e.g. children, pregnancy, burns	
Scenario practice was best of all	
All are best	
Practical sessions	
Time management & schedule	
Good manual	

Subsidiary activities

During the week of the course Operation Smile were also out in Jimma and so it was great to all meet up and exchange stories at the end of the day. It also gave opportunity for Michael and the plastic surgeon working with Operation Smile, Per Hall to team up in theatre and operate together on some paediatric burns patients.

Having Operation Smile in Jimma at the same time as the course was also great for support and equipment and we thank them for all their help. There is also interest in Allie running a Trauma/PTC course in Rwanda at the same time as an Operation Smile mission later this year as the combination seemed to work so well. Allie has been in touch with Operation Smile and Dr James de Courcy regarding this.

As mentioned above, 4 of the 5 faculty had worked in Jimma or were currently working out there and so on the Saturday Graeme gave Mel a tour of the hospital and Michael took her on a surgical ward round to get an insight into the trauma cases seen on the wards. Allie was at a meeting with the head of surgery and the Dean of the University regarding Operation Smile and the visiting lecturer programme but it was clear from the discussion that the course had been well received. Dr Danil expressed a wish that the course should be run again and that it should be incorporated into the curriculum.

Also during their stay in Ethiopia, Allie and Graeme visited Arba Minch Hospital in the South of Ethiopia to visit a friend of Allies who is an Obstetric and Gynaecology senior. There they met with Dr Gersam, head of surgery who was very keen for a

PTC course to be run in Arba Minch. Allie has spoken to Dr James de Courcy regarding this and hopefully this will prove a useful link in the future.

Media coverage

As far as we were aware there was no media coverage during the course.

Evaluation of the success and relevance of the visit

Overall we felt that the visit was very successful, with a strong group of participants and an enthusiastic and committed group of new instructors. Speaking with Michael since the course he says that the residents and interns are now presenting the patients differently at the morning trauma meeting paying attention to primary and secondary survey, something that was not done before. Others who did not attend the course have asked when the next course would run and whilst we were there, participants on course 2 were asking when the next instructor course would be.

We feel that the success of the course was for a number of reasons.

- Targeting the residents and interns who have the time and enthusiasm to learn and teach. Many of the seniors have many commitments and a busy working schedule in and out of the hospital which makes it difficult for them to attend and to potentially run courses in the future. We hope that the enthusiasm continues and the residents and anaesthetists feel that they can run future courses.
- Michael, a trauma surgeon working in Jimma who the residents and interns know and respect was on the faculty. That added huge 'buy in' for the course as it was made relevant to Jimma, with extensive knowledge of local cases and equipment. Having four of the five faculty known to Jimma and many of the participants also helped, as we had an established rapport with them and had the local knowledge made the course more appropriate for their 'set-up'.
- Allie was out in Jimma 2 weeks before the course and so, with Graeme, was able to organize the course before the others arrived. Having worked out in Jimma previously helped immensely in organizing the rooms equipment and buying the sheep!

However the success of future courses run by the new instructors will depend on whether individuals can be released from clinical duties. We were very grateful for Dr Danil and Dr Samson allowing some of the residents to attend but there were several days prior to the course when the names of the participants changed several times due to clinical duties and on call rotas. Also, in total 4 participants throughout the week didn't see the course to completion as they were called away to cover admissions when it was busy.

The instructors were clearly committed to teaching on the second course and their feedback to us expressed how much they enjoyed it. However, none were able to attend for the whole course and our concern is that there would be no one to organize and lead the course. Allie really wanted one of them to shadow her to learn how to run a course and perhaps this skill could be incorporated into the instructor day for future courses.

Future potential plans for PTC dissemination

As discussed previously, the surgical department were very keen for the PTC course to be repeated soon and to be incorporated into the curriculum. By involving the operation smile visiting lecturer and GoStar trauma surgeon in this we may organize another course soon and hope that some of our new instructors will take on more leadership roles in the organization and running of this course. The visiting lecturer and Go star team can then continue to be a support for future courses without having to run it and therefore hand over responsibility to the surgical and anaesthetic departments in the future.

There is a possibility of running a PTC in Arba Minch and also, as discussed previously, Allie has been asked to run a trauma course in Butaro Hospital, Rwanda based on the success of Operation Smile and the PTC working simultaneously on this occasion.

Observations and recommendations for future visits and suggestions as to how such visits could be modified to contribute further to the projects objectives

Even though none of us had been on or run a PTC course before, this course has proven how well it works! With some local knowledge and support it can be easily adapted to suit the set up available. We do feel that the success of the course was partly through the faculty being known to many of the participants and the use of local scenarios and cases. Using local equipment meant that we had no problems with customs, which had been an unfortunate encounter on the previous course in Addis, so knowledge of what is available was invaluable.

The enthusiasm and commitment that we saw was fantastic and made a fun week for us even more worthwhile. We want to make sure that enthusiasm continues and so we suggest that another course is run in the next 3-4 months, not only because it has been requested, but also as many of the instructors will be on rotation to other hospitals and so may not be able to teach in Jimma if left any longer. Another instructor day would be useful as many of those on course two showed great potential. This could be organized by the current Visiting Lecturer in Jimma, Graeme and by the GoStar trauma team. In addition we feel that there must be teaching on how to organize the course. Perhaps a short guide with time frames of when things need to be arranged should be incorporated into the instructor information given on the CD as well as an additional workshop in the instructor course.

Details of any teaching or other material provided

Instructor, participant manuals and all other paperwork were printed in the UK prior to Allie flying to Jimma. This was because printing facilities are unreliable and it was easier to have one less thing to organize whilst in Ethiopia. The certificates were printed blank and the names were added accordingly with the pre and post test scores written on the back of the certificate. In addition, CDs were produced with all the official PTC course slides, the course and instructor manuals, COOL paperwork and the WHO Surgery in the District Hospital in pdf format. Also a selection of Michaels photos of local trauma cases and Xrays were added in addition to Dr James de Courcys photo collection used on previous courses in powerpoint format.

Acknowledgments

I would like to thank Dr Danil and Dr Samson for allowing the residents and interns to come to the course and their support for the future of the PTC in Jimma. Also Dr Yemane and Dr Girma for the use of the airway equipment from the anaesthetic department and the projector.

I would like to take this opportunity to thank the faculty for all of their hard work on the course. Before I left I had only worked with Phil, but we had a fantastic team and it wouldn't have been such a success without you. Michael, thank you for re-arranging your work schedule so that you could join us and share your amazing knowledge of trauma in Jimma. You are such a good role model for the residents and your continuing presence in the trauma meetings ensures that the PTC training will continue everyday! Thank you also to Phil and the Operation Smile team for the equipment for the skills stations.

Dr Andreas Wieser whose knowledge of the hospital and how to source just about anything is incredible. Thank you so much for your help with the sheep, I couldn't have done it without you! Max and Sebastian, thanks for giving up your holiday time to help with course one.

Finally thank you to Dr James de Courcy and Annette Clack for all their support before and during the course.

Dr Allie Green
Course Director
28th March 2014

From left to right: Andreas Wieser, Mel Cockroft, Allie Green, Graeme Harrington, Phil McDonald, Sebastian Fuchs, Michael Schmelz, Maximilian Rauch