

# Course Directors' Report on the PTC Foundation Courses in Hargeisa and Borama, Somaliland, 19<sup>th</sup> – 29<sup>th</sup> January, 2020

## **Purpose of the visit and executive summary**

Following previous very successful collaboration between PTC and the King's Kongo Central Partnership from King's Centre for Global Health at King's College London in the DRC, PTC and the King's Somaliland Partnership collaborated to deliver successive PTC Foundation courses in Hargeisa (the capital of Somaliland) and Borama (a city two hours away near the Ethiopian border). These were funded by THET in collaboration with the King's Somaliland partnership.

A 5-strong combined UK-Kenyan faculty team travelled to Hargeisa to teach the course. A 2-1-2 programme was run in Hargeisa, and then two of the faculty transferred with five newly trained Somaliland instructors to Borama and a second 2-1-2 programme was run by the new instructors with minimal support needed from the PTC faculty.

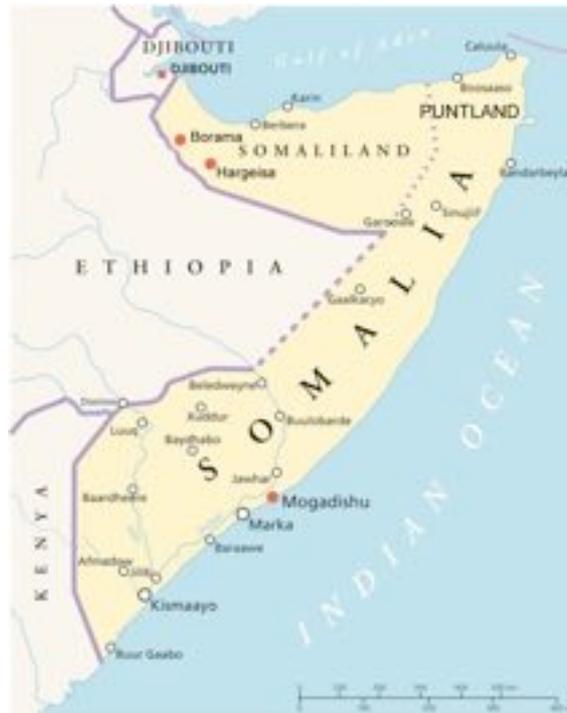
Both the first (and instructor) and second courses in Hargeisa were very successful with high calibre groups of participants, and the same was the case for the Borama 2-1-2 programme – the second Borama course was taught to a group with a higher proportion of nurses and other non-physician participants. There are plans for further expansion of PTC training throughout Somaliland, with a course to be run in Berbera (coastal city) with support from King's / THET, and plans for further extension in Borao as well as in HGH and the other Hargeisa hospitals and in Borama.

## **Background and Key staff involved in planning and co-ordinating**

From the King's Somaliland Partnership website:

*Somaliland is a self-declared but internationally unrecognised state in the Horn of Africa. A brutal civil war ending in 1991 destroyed much of Somaliland's health infrastructure and displaced many of its health workers. Somaliland has some of the world's worst health indicators and a healthcare system beset by problems at the institutional and individual levels. Institutions suffer from weak leadership and management, poor coordination and regulation, and over-stretched, under-resourced staff. There is a serious shortage of health workers, although this situation has improved to some degree in recent years ..... This shortage is compounded by significant skills gaps in the workforce, with very few opportunities for clinicians to access formal postgraduate training, leading to the absence of specialists in most areas of clinical practice.*

*Despite these problems, optimism surrounds Somaliland, which has been described as an overlooked African 'success story'. Emerging from a conflict that ended only 25 years ago, Somaliland is a young democracy that has held successive free and fair elections and remains peaceful and stable in a tumultuous region. The health sector has made remarkable progress since 2000, the date KSP volunteers first visited, when there were no medical schools, no regulatory body, only one nurse training course and few hospitals.*



From discussions the team had with local healthcare practitioners during the course a number of issues relevant to PTC were evident –

- Provision of health care and resources is limited; after presentation with injury there is often an initial shortfall of resuscitation equipment and drugs until relatives can obtain them from a pharmacy.
- There is no legal presumption of consent or option for healthcare workers to proceed with resuscitation or treatment on the basis of the best interests of the patient, frequently resulting in delays of immediate lifesaving treatment until the patient’s relatives can attend to give consent. Women are, we gathered, not allowed to give consent for their own treatment.
- The analgesia workshops on the PTC course revealed issues regarding the repeated presentation of prescriptions for analgesics at pharmacies leading to concerns about the potential for addiction and abuse of drugs. This has led to fears about and avoidance of the use of opioids and other drugs acutely for post-traumatic analgesia.
- There are widespread concerns about the use of analgesic medication in pregnancy leading to avoidance of analgesics in pregnant women with trauma.

### Visiting PTC Course instructors

Dr Jeanne Frossard, Consultant Anaesthetist, London, UK (Course Director for first course)

Dr James de Courcy, Consultant Anaesthetist, Cheltenham, UK (Course Director for Instructor Course)

Dr Mathenge Nduhiu, General Surgeon, Nyeri, Kenya

Dr Ndanya Samuel, Orthopaedic Surgeon, Nanyuki, Kenya

Dr Kirsty Bromage, Anaesthetic Registrar, London, UK

All five of the faculty are experienced instructors and four have instructed or been course directors on PTC Foundation courses. The team worked very well together, and it was particularly valuable to have the presence of Drs Mathenge and Ndanya who brought a strong African perspective to the teaching and were excellent teachers.

## **Details of activities and professional aspects of the visit**

The team arrived in Hargeisa two days prior to the course, which allowed good opportunity for recovery from the flight, orientation and preliminary meetings at the Ministry of Health with Dr Bashir Idiris Aw Ali, Director of Health Service, System Development and Hospitals and Dr Mohammed Abdi Hergeye, Director General at the Ministry of Health Development. Our accommodation was at a nearby hotel and we were able to meet together, and set up and plan the teaching venue and to meet the local coordinator, Dr Ahmed Saeed Ali, who is one of the two consultant orthopedic surgeons at HGH. He had been extensively involved in preliminary planning discussions with Hannah Burrows and Dr Cathy Read from King's, who crossed over with us in Hargeisa for the first day.

### *Location of courses*

The first course was at the Hargeisa Group Hospital, the main teaching hospital in Hargeisa. We had the use of a good sized room on the campus, located in a quiet area away from busy clinical areas. This room was large enough to allow four breakout spaces for scenarios, discussions and skills in its corners.

The second course was at the Borama Regional Hospital in Borama, a city about two hours' drive from Hargeisa. Again, we had use of a room in the campus, rather smaller than that in Hargeisa but large enough for the breakout groups with one on the landing outside. Due to its seating in long benches, it proved challenging though possible to rearrange these to allow breakout groups and skill stations.

### *Facilities*

Food and drink (organised by THET) was delivered very close to the teaching location at both centres, which made it much easier to keep timings for the course under control. We ensured that the timetable for the course fitted with the local prayer times. We had the use of a laptop and digital projection, and we had access to a printer (in the Hargeisa THET office which was situated in the hotel in which we were staying) to allow preparation of timetables, course certificates etc. The THET staff kindly loaned us a projector, laptop and printer for our time in Borama.

## **Contents of the Primary Trauma Care courses**

### **Hargeisa Course 1 – Sunday January 19<sup>th</sup> / Monday January 20<sup>th</sup> 2020**

Full details of individual and mean pre and post course MCQ scores, changes in confidence matrix, fulfillment of learning objectives etc for each of the courses below are given in the accompanying spreadsheets and are summarised in this document.

Following discussion prior to the team's departure for Somaliland, the course manuals were printed locally and were distributed to the participants, who had also been provided beforehand with pdf copies of the course manual.

It was not felt practicable to obtain a goat thorax or airway for the skill stations. The chest drain station was taught using a model developed by Jeanne Frossard and cricothyroidotomy was taught using corrugated tubing covered with plastic sheeting, aided by demonstration of the anatomy on the participants' necks. Both of these worked satisfactorily.

After discussions between Hannah Burrows and Ahmed Saeed Ali it had been felt best to start the programme at 0700 and run until afternoon prayers at 1530. The lunch break needed to be one hour to allow for both prayers and food.

The plan had been for 20 participants with a mix from the Hargeisa hospitals and several from Borama, though as a result of various factors the final attendance ended up at 29.

<b>Hargeisa Course 1 participants – n=29</b>			
Name	Post	Base hospital	Gender
Dr Hamse Mahamed Jama	General Practitioner	BGH	male
Dr Ahmed Mohamed Aden	General Practitioner	HGH	male
Dr Afnan Abdirahman Mohamed	general surgery resident	HGH	female
Dr Liban Abdirahman Ismail	General Practitioner	HGH	Male
Dr Abdi Shakur Ahmed Mohamed	General Practitioner	HGH	male
Dr Noura Mahamoud Ahmed	General Practitioner	HGH	female
Dr Abdilaahi Ahmed Hayir	intern doctor	HGH	male
Dr Awil Farah Jama	General Practitioner	HGH	MALE
Dr Abokor Jbril Yusuf	general practitioner	HGH	MALE
Dr Mustafe Hassan Dahir	General Practitioner	HGH	male
Dr Nasir Abdi Mohamed	General Practitioner	BGH	MALE
Dr RAHIMA MUSSE HUSSEIN	general practitioner	HGH	FEMALE
DR. Saed Mohamed Osman	medical doctor	HGH	male
Dr Ahmed Saeed Ali	Consultant orthopaedic surgeon	HGH	Male
Dr Fathia Mohamed	Family Physician	BRH	Male
Dr Manal Mohamed Abdi	General Practitioner	HGH	Female
Dr Ahmed Sharif Warfa	General Practitioner	HGH	Male
Dr Mustafe Nour Mohamed	General Practitioner	BRH	Male
Dr Abdirahman Adan Osman	General Practitioner	BRH	Male
Dr Hassani Mohamoud Nour	General Practitioner	HGH	Male
Dr Abdifatah Mohamed Abdi	General Practitioner	HGH	Male
Dr Shukir Mohiel Dahir	General surgery resident	EAUH	Female
Dr Hassan Ali Daoud	General Practitioner	HGH	Male
Dr Ismail Yussuf Haibe	General Practitioner	HGH	Male
Dr Hawa Dahir Mohamoud	Family Physician	BRH	Female
Dr Hana Omer Ahmeed	General Practitioner	HGH	Female
Edna Omer Ma'Alin	Anaesthetist and Midwife	EAUH	Female
Asiya Mohamoud aw nuoh	Nurse and midwife	EAUH	Female
Dr Ahmed Mohamed Jama	General Practitioner and Obstetrics	EAUH	Male
Farhan Omer Ali			

Those highlighted in yellow proceeded to instructor course (n=13) and all of these, with the exception of Dr Fadhiya Mohamed (who taught on the Borama courses) taught on the second Hargeisa course.

<b>Hargeisa Course 1 programme</b>			
<b>Day 1</b>			
07.00	30'	Welcome and Introductions and MCQ	Jeanne
07.30	15'	Local Trauma Perspective	Ahmed Saed
07.45	15'	PTC Overview	Jeanne
08.00	30'	ABCDE of Trauma and Primary survey	Mathenge
08.30	10'	BREAK	
08.40	40'	Airway and Breathing	James
09.20	35'	Circulation and Shock	Kirsty
09.55	35'	Chest Injuries	Ndanya
10.30	10'	BREAK 10	
10.40	80'	<i>Skill stations</i>	
	(40')	<i>Basic / Advanced Airway</i>	James /Jeanne
	(20')	<i>Cervical spine / Logroll</i>	Mathenge
	(20')	<i>Chest drains</i>	Ndanya

12.10	45'	LUNCH BREAK and PRAYERS	
12.55	50'	Abdominal, pelvic and Limb injuries	Mathenge/Ndanya
13.45	15'	Demonstration Scenario	all
14.00	70'	Scenario Practice (in groups)	all
15.10	5'	Overview and summary	jeanne

Day 2			
07.00	45'	Head and Spinal injuries	Mathenge/Ndanya
07.45	30'	Trauma in Children and Pregnancy	Jeanne/james
08.15	30'	Burns	Kirsty
08.45	15'	BREAK	
09.00	80'	Workshops <i>Analgesia</i> <i>Transportation</i> <i>Paediatric trauma</i> <i>Neurological assessment</i>	James Ndanya Jeanne Mathenge
10.30	30'	Secondary survey	James
11.00	50'	Disaster management	Mathenge/all
11.50	45'	LUNCH BREAK and PRAYERS	
12.35	80'	Scenarios (in groups)	all
12.55	10'	Break	
13.05	15'	Repeat MCQ's	
13.20	20'	Summary. Feedback and Evaluation	Jeanne
13.40	15'	Close and discussion/planning of instructor day	Jeanne
14.55		Certificates	all

Despite a late start due to delayed arrival of a number of the participants, we caught up to time by mid-morning and the course ran well to time thereafter.

The second day of the course started at 0700, and the rest of the day ran well to time. The Secondary Survey was done as a demonstration with Mathenge Nduhiu volunteering to do a blinded survey for injuries suggested by the participants, this being a method that has worked well on other courses. It gave evident enjoyment and engagement on the part of the participants.

The disaster management session was run as a plenary discussion group by Dr Mathenge.

Selections of the published PTC scenarios were used in the scenarios session.

Following successful practice in Kenya, the MCQ questions were made into a series of powerpoint slides and this session was led at the start and finish of the course by Dr Ndanya, which worked well.

During the two days the faculty, together with Dr Ahmed Said Ali, selected 13 participants for the instructor day. Others would have been appropriate too, and their names are being held back (together with approximately six from the second Hargeisa course) for a future instructor course.

At the end of the second day there was a briefing on the next day. The Instructor Course participants were given printed copies of the new (draft) PTC Instructor Course Manual, and DropBox was used to distribute the (draft) *How to run a PTC Course*, the PTC slides, Instructor Course Manual, scenarios, assessment forms and all other materials electronically (including the MCQ paper as a powerpoint presentation) to all the trainee instructors. This resource has proved effective and the participants said that they liked this approach. The trainee instructors were encouraged to look through the instructor course manual that evening and were briefed about the micro-teaching assignments that they would need to present the next day.

## Instructor Day – Tuesday 21<sup>st</sup> January 2020

### Participants in the Instructor course

Thirteen of the participants from the first two days proceeded to the instructor day (highlighted on the list shown above). This course and the following one in Borama were being used as a pilot for the revised instructor course programme, slides and manuals that have been compiled by James de Courcy and colleagues. The participants were aware of this and we invited feedback from them on how it worked for them.

### Hargeisa Instructor day timetable

07.00	15'	Registration, and Trainee Instructors fill in forms	
07.15	15'	Welcome and Introduction	James
07.30	45'	<i>Interaction, communication and learning</i> <ul style="list-style-type: none"> <li>• Adult learning</li> <li>• Motivation</li> <li>• Interaction and communication</li> <li>• Asking questions</li> <li>• Feedback</li> </ul>	James
08.15	60'	<i>How to give presentations</i> <ul style="list-style-type: none"> <li>• General introduction including difficult situations (20')</li> <li>• Lecture (20')</li> <li>• Discussion group (20')</li> </ul>	Jeanne Jeanne Kirsty
09.15	15'	BREAK	
09.30	40+40 minutes	Workshops 1: Lecture and Discussion	Run as 2 discussion and 2 lecture stations swapping at 40'
10.50	5'	BREAK	
10.55	40'	<i>How to give presentations</i> <ul style="list-style-type: none"> <li>• Teaching a skill (20')</li> <li>• Scenario (20')</li> </ul>	Ndanya Mathenge
11.35	40'	Workshops 2: Scenario and Skills	As above – swapping before and after lunch break
12.15	60'	LUNCH BREAK	
13.15	40'	Workshops 2: Scenario and Skills	
13.55	10'	BREAK	
14.05	60'	Planning your course (Discussion group)	All, chaired James
15.05	30'	Evaluation and Feedback, Certificates	all
15.35		Finish	

James de Courcy led the day, which began with an introduction, and discussion of what the participants would be doing later in the day. The day ran smoothly and the timings that had been estimated as above worked well (a slight delay due to collapse of the laptop/projector table with the resultant need to swap laptops was caught up).

The day went very well, with enthusiastic participation from the instructor trainees. At the end of the day the teaching assignments for the following two days for which the participants nominated themselves were confirmed, and they held a faculty meeting and discussed the planned teaching for the second day. Drs Ahmed Said Ali and Ahmed Mohamed Aden were agreed as course director and codirector for the first day, and Dr Afnan Abdirahman Mohamed as codirector for the second day.

Timings/IT/MCQ/registration were assigned to volunteers. The faculty encouraged them to share skill stations and discussion groups, as they would be a big faculty, and to feedback to each other as on the instructor day.

### **Feedback from Candidates on PTC instructor course in Hargeisa 21<sup>st</sup> January 2020**

*What was the best part of the instructor's course?*

- Good interaction
- Ability to ask questions, interactive learning
- Moving around
- Relevant and applicable content
- Running scenario stations x6
- Running discussion groups
- Acquiring the confidence and skill to run PTC
- Running skills stations x2
- The practical part of the day
- Helpful mentors and feedback

*What are three changes you plan to implement as a result of training?*

- Relevance
- Base my skills teaching on the local resources available
- Emphasize team work
- Smaller groups for teaching
- Establish a PTC committee x2
- Participate in the administration of courses
- Preparation and planning x3 (“to be well equipped for the next training”, “planning”, “preparation and planning”)
- Use discussion groups to teach
- To learn from each other
- To be more interactive
- Realism in simulation (“managing real cases like inserting an NG tube is better”)
- Gain in confidence through experience and knowledge x2
- Time management
- I want to speak slower with a nice pace
- I want to sound and seem calmer when I do the skills
- I want to start with the learners giving feedback

*What should we change to improve the instructors' course?*

- I can't add anything, this course went well. Thank you.
- Everything was on point, only thing is that we were late as a population also, so to make people on time every time
- The program was complete, thanks
- For now, it is excellent what you are doing
- Limit the personels to get through everyone (?whether this means limit number of people on course)
- Frequent visits to conduct such training would be very good. This will sustain the course.

- 7am to 3pm is hard, so if you can change or shorten the time it will be good
- Stretch the time out
- Duration (?whether too long or short)
- Discussions
- Video lectures and online training would be good
- Nothing so far!

### Instructor feedback from PTC Instructor course

- Very teachable
- Easy for candidates to understand
- Unusual position of lunch break owing to Somaliland made timetabling challenging.
- 12 is the perfect number for 4 instructors - any more than that would have been too many. If there are 2 instructors, 8 would be the maximum number
- 10 minutes per person is very important – 5 minutes for a lecture and 5 for feedback
- Amount of time allocated for the scenario teaching and demonstration
- Suggestion of mandating an amount of time per candidate or ratio of instructors to candidates – EMPHASIS on numbers
- Prescribing amount of time for a skill / a scenario / etc.. and feedback allocated
- The director of the course should NOT be doing admin, logistics or clinical responsibilities
- Discussed the idea of uploading video material of skills sessions for quality assurance
- Bringing out the theory of teaching really suited a group such as the one we had – perhaps a more senior or academic group would benefit from the theory. Young people / many young doctors want the craft.
- Removing the theory in favour of the practice was a success

### Anything to change?

- Slides: whether they need to be changed slightly to include some things that were in the text and the order can be changed
- Giving the candidates clear instructions in writing the day before so that they know what to prepare for the next day: ?whether to give them hard copy of the PTC slides in A5 and scenarios in A5 also
- Comments on difficult situations: how to deal with difficult scenario station: eg. someone is stuck, unable to pick an injury, what to do if someone makes a mistake ...

### Second Hargeisa 2 day course – 22<sup>nd</sup>-23<sup>rd</sup> January 2020

Hargeisa Course 2 Participants – n=23			
Name	Post / role	Base hospital	Gender
Dr.ABDIAZIZ MOHAMED ADAM	Doctor	HGH	Male
Dr.Abdirashiid Abdillahi Dalmar	Doctor	HGH	Male
Abdirisaaq Mohamed Mohamud	Anesthetist	HGH	Male
Dr.Ahmed Hassan Barkhad	Doctor	HGH	Male
Dr.Ahmed Mohamud Jama	Doctor	HGH	Male
Dr.Aidarous Abdi Ali	Doctor	HGH	Male
Dr.AIDAROUS MOHAMED IBRAHIM	Doctor	EAUH	Male
Asma Mohamed Hussein	Nurse	HGH	Female
Axmed Haybe Naqeeye	Nurse	HGH	Male
Farhan Ali Omer	Admin	HGH	Male
Dr.Farhan Yasin Ibrahim	Doctor	HGH	Male
Dr.Hamsa Nuuh Iman	Doctor	HGH	Male
HASSAN khadar sh.mahamoud	Anesthetist	EAUH	Male
layla muhamed abdi	Nurse	HGH	Female

Mubarak Mohamed Farah	Anesthetist	HGH	Male
Dr.Muna mowliid Abdi	Doctor	HGH	Female
Dr.MUSE AHMED AYNASHE	Doctor	HGH	Male
Dr.Naima Ahmed Mohamed	Doctor	EAUH	Female
Omer Aden Esse	Nurse	HGH	Male
Dr.Rahma Hassan Mohamed	Doctor	HGH	Female
Dr.Ridwan Mohamed SAEED	Doctor	HGH	Male
Dr.Roda Jama Gelle	Doctor	HGH	Female
SAMIIRA MOHAMED MACALIN	Nurse	HGH	Female

HGH = Hargeisa Group Hospital; EAUH = Edna Adan University Hospital, Hargeisa

PTC Course timetable Hargeisa, Course 2			
<b>Day 1</b>			
07.00	30'	Welcome and Introductions and MCQ	Ahmed
07.30	15'	Local Trauma Perspective	Abdishakur
07.45	15'	PTC Overview	Awil
08.00	30'	ABCDE of Trauma and Primary survey	Noura
08.30	10'	BREAK	
08.40	40'	Airway and Breathing	Ahmed Mohamed Aden
09.20	35'	Circulation and Shock	Saed
09.55	35'	Chest Injuries	Afnaan
10.30	10'	BREAK 10	
10.40	80'	<i>Skill stations</i>	
	(40')	<i>Basic / Advanced Airway</i>	Noura / Afnan / Saed / Ahmed
	(20')	<i>Cervical spine / Logroll</i>	Ahmed / Abdishakur
	(20')	<i>Chest drains</i>	Hawa/ Awil
12.10	45'	LUNCH BREAK and PRAYERS	
12.55	50'	Abdominal, pelvic and Limb injuries	Ahmed Mohamed Aden / Ahmed Saeed
13.45	15'	Demonstration Scenario	
14.00	70'	Scenario Practice (in groups)	all
15.10	5'	Overview and summary	Ahmed Saeed

<b>Day 2</b>			
07.00	45'	Head and Spinal injuries	Ahmed
07.45	30'	Trauma in Children and Pregnancy	Saeed/ Ahmed Mohamed Aden
08.15	30'	Burns	Mustafe
08.45	15'	BREAK	
09.00	80'	Workshops <i>Analgesia</i> <i>Transportation</i> <i>Paediatric trauma</i> <i>Neurological assessment</i>	Awil, Manal Noura / Mustafe Aaed / Abdishakur Ahmed Mohamed Aden / Ahmed Saeed
10.30	30'	Secondary survey	Ahmed Mohammed Aden
11.00	50'	Disaster management	Manal
11.50	45'	LUNCH BREAK and PRAYERS	
12.35	80'	Scenarios (in groups)	all
12.55	10'	Break	
13.05	15'	Repeat MCQ's	
13.20	20'	Summary. Feedback and Evaluation	
13.40	15'	Close and discussion/planning of instructor day	
14.55		Certificates	

#### Notes –

The new instructors ran the day with extremely efficient organisation and timekeeping and excellent teaching. The same timetable as on the first course was used and the timings of this worked well. Individual feedback and mentoring was provided for each session and throughout by the PTC visiting faculty.

Teaching was in mixed Somali and English, which worked very well (Dr Noura Mahamoud Ahmed, who spoke early in the day, having ensured that the nurses who were present would be happy if English was used). The English language PTC slides seemed to be well comprehended by those who did not have such good English.

During the course we also met the other consultant orthopaedic surgeon in HGH, and Dr Mohamed Mosa, Chairman of the Somaliland Medical Association, with whom we had a long conversation about the potential for expansion of the course through Somaliland and

potential support for this from the Somaliland diaspora organisations. The Head of Training at HGH, Mrs Roda Ali Ahmed attended and observed much of the PTC course and instructor course and was very supportive of it and the aim of expansion both in Hargeisa and more widely.

Very efficient registration and completion of the MCQ (again by powerpoint slides which worked well), and fairly prompt start. Excellent timekeeping for remainder of day.

The day went very well, with superb organisation and coordination by the new faculty team. The faculty trainers were present throughout the day, giving verbal and written feedback to the instructors immediately after each of their sessions, although the quality of the teaching and organisation that they delivered was such that we often felt largely superfluous.

At the end of the day a meeting took place involving the members of the Hargeisa faculty, the visiting PTC faculty as well as Dr Mohamed Mosa and his colleague from the Somaliland Medical Association. This is detailed below.

### Summary of multiple choice questionnaire scores and confidence scores before and after the Hargeisa courses

See appended spreadsheet for detailed information. Mean overall changes were:

Hargeisa Course 1	pre	post
MCQ mean score	70%	82%
Confidence matrix mean score	68.5%	92%
Hargeisa Course 2		
MCQ mean score	56%	74%
Confidence matrix mean score	67%	94%

### Feedback

After each of the two courses a session of brainstorming feedback was held, with very positive comments.

Collated Hargeisa feedback (both courses)	
Good	Could be better
Participation opportunity, practical (9)	More time on course +++
Increased confidence ++	Practice more skills
Skills +++++	More scenarios +
Interactive	More participation
Team organisation ++++	More equipment
Increased knowledge ++	Make start time 0800
Time management +++++	Try real patients
Interaction between different regions	Improved equipment
Communication	Change nothing x10
Theory and practical mix, Knowledge	More time x9 ("1 day extra" + "change the time" "spread to 4-5 days" "increase days" "3 days" "increase days of course" "more days" "4 days" "one more day")
Scenarios (x 14)	Increase the number of scenarios x3
Varied instructors	More workshop time

Motivating instructors, Instructor attitude	More time between lectures for questions
Well presented	"Some real practical demonstrations rather than simulations"
Ideas on using the resources available	"If it's possible, real patient practice would have been amazing, specially securing airway and chest intubation"
Workshops x3	
Helpful instructors x2	
"PTC is an amazing program"	
"How it was applicable to every member of the team to apply to knowledge and the technique"	
"Teaching you to be systematic"	
Making disaster plans	
"Theory and practice helps us apply knowledge confidently"	

Following the first 2-1-2 programme in Hargeisa, Mathenge Nduhiu, Ndanya Samuel and Kirsty Bromage departed home and Jeanne Frossard and James de Courcy transferred to Borama, a city two hours away. This is a smaller centre than Hargeisa, with a regional referral hospital at which the course was run.

### Borama Course 1

The first Borama course and instructor course were taught by Drs Afnan Abdirahman Mohamed, Mustafe Hassan Dahir, Fadhiya Mohamed, Manal Mohamed Abdi and Hawa Dahir Mohamed – Dr Hawa directed the courses. Jeanne Frossard and James de Courcy were present throughout the course to support and mentor the instructors.

Much of the preparatory organisation for the 2-1-2 programme in Borama had been done by Dr Mustafe Abdi Ahmed, who also took part in the first course and instructor course and directed the second PTC course. For the first course a senior group of participants had been arranged, as listed below, and a number of those unable to proceed to the instructor course due to limitations on numbers have had their names retained for a planned further instructor course. The participants who proceeded to the instructor course are highlighted, those in blue teaching on the first day of the second PTC course and those in yellow on the second: Dr Mustafe Abdi Ahmed directed the second course and was present for both days.

Borama Course 1 Participants			
Name	Post / role	Base hospital	Gender
Dr Habon Abdi Omer	Medical Doctor	Berbera Regional Hospital	Female
Mohamed Ali Meigag	Anesthetist	Hargeisa Group Hospital	Male
Dr Mubarik Abdilahi Magan	medical doctor	borama reginal hospital	male
Dr Mohiaden Hassan Jama	medical doctor	Alhayatt Hospital	male
Dr Abdilahi Mohamed Elmi	medical Doctor	hargeisa Group Hospital	male
Dr Jama Ali Yusuf	medical doctor	hargeisa Group Hospital	male
Ahmed-Yasiin Abdi Osman	nursing	hargiesa group hospital	male
Hamse Ali Mohamed	nurse	Hargeisa Group Hospital	male
Dr Abdifatah Mahamud Oogle	medical Doctor	Hargeisa Group Hospital	Male
Dr Abdirashid Ismail Elmi	doctor	Gabiley hospital	male
Dr Abdikadir Jibril Adam	doctor	Alhayat hospital	male
Dr Naima Yusuf Elmi	doctor	Gabiley hospital	female
Dr Abdilahi Ahmed Mohamed	doctor	Edna Adan hospital	male
Dr Hodan Jama Abdi	doctor	borama reginal hospital	female
Dr Hayat Mohamed Hassan	doctor	borama reginal hospital	female
Dr Mawliid Mohamed Jamac	doctor	Berbera Regional Hospital	male
Ibrahim Adem Farah	aneasthist	Borama reginal hospital	male
Abdirahman Dahir Wais	aneasthist	Borama regional hospital	male
Abdirashid Nour Derie	aneasthist	Hargeisa Group Hospital	male

Dr Mustafe Abdi Ahmed	doctor	Borama regional hospital	male
Dr Ahmed Abdirahman Elmi	doctor	Borama regional hospital	male
Dr Abdirahman Mohamed Abib	doctor	Edna Adan hospital	male
Dr Abdulahi Omar Hassan	doctor	gabiley hospital	male
	Instructor course; taught course 2 day 1		
	Instructor course; taught course 2 day 2		
	taught course 2 both days		

<b>Borama Course 1 Timetable</b>			
<b>Day 1</b>			
07.00	30'	Welcome and Introductions and MCQ	Hawa
07.30	15'	Local Trauma Perspective	Mustafe
07.45	15'	PTC Overview	JdeC
08.00	30'	ABCDE of Trauma and Primary survey	Fadhiya
08.30	10'	BREAK	
08.40	40'	Airway and Breathing	Hawa
09.20	35'	Circulation and Shock	Fadhiya
09.55	35'	Chest Injuries	Afnaan
10.30	10'	BREAK 10	
10.40	80'	<i>Skill stations</i>	
	(40')	<i>Basic / Advanced Airway</i>	Fadhia & Hawa
	(20')	<i>Cervical spine / Logroll</i>	Mustafe
	(20')	<i>Chest drains</i>	Afnaan
12.10	45'	LUNCH BREAK and PRAYERS	
12.55	50'	Abdominal, pelvic and Limb injuries	Mustafe & Hawa
13.45	15'	Demonstration Scenario	all
14.00	70'	Scenario Practice (in groups)	all
15.10	5'	Overview and summary	

<b>Day 2</b>			
07.00	45'	Head and Spinal injuries	Mustafe
07.45	30'	Trauma in Children and Pregnancy	Fadhiya
08.15	30'	Burns	Hawa
08.45	15'	BREAK	
09.00	80'	Workshops <i>Analgesia</i> <i>Transportation</i> <i>Paediatric trauma</i> <i>Neurological assessment</i>	Manal Hawa Fadhia Mustafe
10.30	30'	Secondary survey	Afnan
11.00	50'	Disaster management	Manal
11.50	45'	LUNCH BREAK and PRAYERS	
12.35	80'	Scenarios (in groups)	All
12.55	10'	Break	
13.05	15'	Repeat MCQ's	Manal and Fadhiya
13.20	20'	Summary. Feedback and Evaluation	
13.40	15'	Close and discussion/planning of instructor day	Hawa, JdeC
14.55		Certificates	

## Feedback and learning outcomes from Borama Course 1

Borama Course 1	pre	post
MCQ mean score	58%	81%
Confidence matrix mean score	69%	92%

Borama 1 <sup>st</sup> course collated feedback	
Good	Could be better
Educationally good ++++	Congested time
ABCDE, Systematic approach ++++++	Increase the days +++
Scenarios ++++	Increase the scenario sessions ++++
Team work ++++	Room size +
Experience sharing	More skills ++
Skills ++	Pictures and videos
Time management ++	More discussions
New friendship	Increase practical parts, live demonstrations+
Well organised instructors, organisation	Time was short+++++
Refreshment	Do training again
Food	Online course
Practical sessions+++	More practical sessions
Secondary Survey +	Have a good mannequin
Disaster management	
Cervical spine stabilization	
Demonstrations	
Trauma in pregnancy	
Chest drain	
Paediatric trauma	
Burns	
Disaster Management	

### Borama Instructor Course

The instructors highlighted in the table above taught the course with the draft revised instructor course manual and slides and, although receiving mentoring and feedback from James de Courcy and Jeanne Frossard throughout the day, we again felt largely superfluous and the standard of teaching and organisation of the day were excellent.

The faculty divided the sessions between them and all delivered the instructor course material at an excellent standard, and the practical workshops went very well.

The faculty commented that they found the instructor materials easy to use and beneficial. The performance of the trainee instructors in the practical teaching sessions was excellent, and the feedback they gave on the day was very encouraging. At the end of the day, in the course planning section, the instructor trainees agreed that Dr Mustafe Abdi Ahmed would direct the second course and be present for both days. They agreed, after some discussion, to split the teaching of the course between them and that those mostly coming from Hargeisa would teach the first day before returning to their workplaces, and that the second day would be taught predominantly by those based in Borama.

Please say how well we fulfilled the learning objectives for the day?	Very poor 1	Poor 2	Average 3	Good 4	Very good 5
To understand the PTC Course content & how we teach it					13
To understand the theories behind effective teaching & learning				1	12
To identify the skills we need to teach & learn effectively					13
To apply these skills & knowledge to delivering the PTC Course					13

## Borama Course 2

A larger than expected number of participants came for the course because apparently word had got around about it. The instructors therefore decided to ask those who had not been booked for the course to leave and to put their names down for a future course.

Borama Course 2 participants. N=22			
Name	Post / role	Base hospital	Gender
Dr Haddi Bashiir Haddi	Doctor	BRH	Male
Dr Abdirahman Osman Faahiye	Doctor	BRH	Male
Abdirashid Sh Husen Mumin	nurse	BRH	male
Saynab Elmi Ali	Nurse	BRH	female
Abdirashid Suleiman Ali	radiology	BRH	male
Dr Abdirahman Ali Mahamed Gurguurte	Doctor	BRH	Male
Shuaib Abdullshi Ali Hosh	Anaesthesia	BRH	Male
Abdirahman Mahamed Khalif	OT	BHR	Male
Abdikarim Isak Waber	dentistry	BRH	Male
Abdifatax Xamud Cisman	Anesthetist	BRH	Male
Ismacil Nur Ali	nurse	BRH	Male
Suleeman Xirse Colow	nurse	BRH	Male
Nuura Abdirahman Ahmed	midwife	BRH	female
Dr Abdikadir Mohamed Ahmed	intrern dr	BRH	Male
Dr Osman Abdikarin Osman	Doctor	BRH	Male
Fadxiya Mahmud Dixiye	nurse	BRH	female
Dr Siciid Bashir Abdi	Intern	BRH	Male
Dr Najma Mahamed Muhumed	Intern	BRH	female
Ubah Mawlid Quraysh	nurse	BRH	female
Dr Asma Abdi Aziz Haji	Intern	BRH	female
Aamina Dahir Barkhad	nurse	BRH	female
Hibaaq Cali Jamac	nurse OT	BRH	female

Borama Course 2 programme			
Day 1			
07.00	30'	Welcome and Introductions and MCQ	Mustafe/Mahamed
07.30	15'	Local Trauma Perspective	Mahamed
07.45	15'	PTC Overview	James de Courcy
08.00	30'	ABCDE of Trauma and Primary survey	Dr Abdirahman
08.30	10'	BREAK	
08.40	40'	Airway and Breathing	Dr Abdikadir
09.20	35'	Circulation and Shock	Dr Abdilahi
09.55	35'	Chest Injuries	Dr Habon
10.30	10'	BREAK 10	
10.40	80'	<i>Skill stations</i>	
	(40')	<i>Basic / Advanced Airway</i>	Abdilahi / Mahamed
	(20')	<i>Cervical spine / Logroll</i>	Abdirafah
	(20')	<i>Chest drains</i>	Abdirahman
12.10	45'	LUNCH BREAK and PRAYERS	
12.55	50'	Abdominal, pelvic and Limb injuries	Mustafe / Abdirahman
13.45	15'	Demonstration Scenario	all
14.00	70'	Scenario Practice (in groups)	all
15.10	5'	Overview and summary	Mustafe

Day 2			
07.00	45'	Head and Spinal injuries	Mohiaden / Hodan
07.45	30'	Trauma in Children and Pregnancy	ANour / Mustafe
08.15	30'	Burns	Mubarik
08.45	15'	BREAK	
09.00	80'	Workshops <i>Analgesia</i> <i>Transportation</i> <i>Paediatric trauma</i> <i>Neurological assessment</i>	Mubarik Naima Hodan Wacays
10.30	30'	Secondary survey	all
11.00	50'	Disaster management	Naima
11.50	45'	LUNCH BREAK and PRAYERS	
12.35	80'	Scenarios (in groups)	all
12.55	10'	Break	
13.05	15'	Repeat MCQ's	
13.20	20'	Summary. Feedback and Evaluation	
13.40	15'	Close and Certificates	

Borama 2 <sup>nd</sup> course collated feedback	
Good	Could be better
ABCDE , systematic approach+++++++	Want to apply principles in my hospital
Secondary survey+	Increase practical parts, live demonstrations+
PTC principle knowledge	Time was short+++++
Organisation	Do training again
Team work	Online course
Disaster management	More practical sessions
Cervical spine stabilization	Scenarios+
Demonstrations	More role play and case scenarios+
Skill stations	Have a good mannequin
Practical sessions+++	
Scenarios++	
Trauma in pregnancy	
Chest drain	
Paediatric trauma	
Burns	
Disaster management	

Please say how well we fulfilled the learning objectives for the course?	Very Poor	Poor	Average	Good	Very Good
	1	2	3	4	5
• understand and apply a system for assessing and treating trauma patients				4	18
• have the knowledge, skills and attitudes of the PTC principles				3	19
• apply these PTC principles to where you work				3	19

Borama Course 2		
MCQ mean score	40%	72%
Confidence matrix mean score	23%	86%

## **Media coverage**

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

## **Subsidiary Activity**

During the course individual and group contact was made with the anaesthetics staff in both centres, resulting in setting up of a linkage for sharing of educational and CPD materials relevant to anaesthetic practice in Somaliland, where the anaesthetic staff have minimal access to such materials. It is likely that this may extend to skype tutorials, with all three of the UK anaesthetists keen to develop this.

In addition as a result of discussions between JdeC and Naima Mohamed, Head of Womens' and Childrens' services at Edna Hospital, Hargeisa, Leila Muhumed Abdi, Head of Paediatrics and Obstetrics at HGH, and Drs Hawa Dahir Mohamed and Mustafe Abdi Ahmed (Obstetrics and Family Medicine, Borama), JdeC has put them in touch with the UK Faculty for the PROMPT obstetric course which they were very keen to explore developing, and is also contacting the Advanced Life Support Group in Manchester about material availability for the Paediatric Life Support course (JdeC is also an APLS and PLS instructor).

As noted above, we had useful meetings during the courses with Mrs Roda Ali Ahmed, HGH Quality Improvement and Educational Coordinator, who was very supportive of the course and keen on its dissemination. In addition, as noted above we had useful meetings with Dr Mohamed Mosa, Chair of the Somaliland Medical Association as well as meetings before the course with Dr Bashir Idiris Aw Ali, Director of Health service, System Development and Hospitals and Dr Mohammed Abdi Hergeye, Director General at the Ministry of Health Development. During the courses we met and had good discussions about PTC with Dr Yasin Arab Abdi, Hargeisa Group Hospitals Director and with Dr Abdisalaan Jama Ibrahim, the Borama Regional Hospital Director. We are very grateful to both Dr Yasin and Dr Abdisalaan and their respective staff for the support they gave to the courses.

## **Evaluation of the success and relevance of the visit**

We were delighted with the way that the second Hargeisa course was organised and taught by the new instructors, and similarly with the 2-1-2 Borama courses. The new instructors found the revised instructor course straightforward to teach and expressed their feeling that the slides and manual worked well. The changes in the MCQ scores and confidence matrices (see spreadsheets) were encouraging, and we were very pleased with the enthusiasm of the new PTC providers and instructors and their desire to see PTC spreading further in their centres and through Somaliland.

Although this cannot be regarded as a formal assessment, a measure of the success of the course sequence was that the standard of performance in the simulation scenarios as witnessed by the visiting faculty was maintained at the same high standard throughout all four "generations" of courses, and JdeC commented, as an ATLS as well as a PTC instructor, that a number of the scenarios he witnessed would have been regarded as showing instructor potential in an ATLS course.

## **Future plans for PTC dissemination**

King's / THET have plans to extend the training to Berbera (city on the coast). One of the instructors from the Borama course, Dr Habon Abdi Omer, is based in Berbera and would be very keen to be involved in the teaching and running of this course – her performance on the Borama courses was excellent.

At the end of the Hargeisa course a meeting took place involving the members of the Hargeisa faculty, the visiting PTC faculty as well as Dr Mohamed Mosa and his colleague from the Somaliland Medical Association. Options for continuation and dissemination of PTC in Somaliland were discussed. The visiting faculty members stressed PTCF's aim that the Somaliland PTC faculty should feel ownership of and responsibility for this development and should feel able to develop and adapt it, within the constraints of not altering the slide text context and maintaining reporting of course activity to PTC headquarters through course reports. The Somaliland faculty, with the SMA colleagues, have agreed to form a committee to guide this, and to bring in membership from Borama and other centres to which the course is spread. They agreed to look for international support (eg the Somaliland diaspora) and support from the Health Ministry and Director General with the aim of extension to the rest of Somaliland. Dr Mosa expressed the readiness of the SMA to take leadership and to support administration for further courses and TOT courses.

After a question about certification JdeC commented that these are certificates of attendance and completion of the course rather than competence, and suggested that the design of the certificates should be locally adapted (eg possibly putting the SMA crest on them once King's involvement had ceased) and locally printed by the PTC Somaliland Committee.

Dr Mosa had commented that the Somaliland Diaspora are keen to support initiatives such as this and James de Courcy and Jeanne Frossard have offered to speak to meetings in the UK to support this, the main centres (London, Birmingham, Bristol and Cardiff) being not far from where they respectively live.

Since the course we have learned in an email from Dr Mustafe that the Borama instructors are going to run a further PTC course in 2 weeks' time, and are planning to run further courses thereafter.

### **Acknowledgments**

We would like to take this opportunity to thank Hannah Burrows, Hannah Ware, Katerina Peithi, Cathy Read and the King's team; Samatar Ahmed, Ayaan Abdisamad, Kate Frewer and THET colleagues and the local Hargeisa and Borama instructor teams, who made everything run very smoothly.

Our faculty team proved excellent and worked well together, and we would like to state our great appreciation to them.

*Drs Jeanne Frossard and James de Courcy  
PTC Course Directors  
31<sup>st</sup> January 2020*