

Primary Trauma Care Course Report

Hôpital De La Convention Baptiste D'Haiti and Hope Health Action
Carrefour La Mort, Nord, Haiti

21st January – 25th January 2019

Author: Rob Dalton

Co-authors: Lydia Longstaff, Annie Peskett, Michelle Joseph

Table of Contents

<u>EXECUTIVE SUMMARY</u>	<u>3</u>
<u>KEY STAFF INVOLVED IN PLANNING AND CO-ORDINATING.....</u>	<u>3</u>
<u>COURSE PARTICIPANTS</u>	<u>3</u>
<u>COURSE INSTRUCTORS/FACULTY TRAINING TEAM</u>	<u>4</u>
<u>ADVERTISEMENT AND MEDIA COVERAGE</u>	<u>4</u>
<u>COURSE 1: 21ST – 22ND JANUARY 2019.....</u>	<u>5</u>
<u>INSTRUCTOR TRAINING DAY: 23RD JANUARY 2019.....</u>	<u>7</u>
<u>COURSE 2: 24TH – 25TH JANUARY 2019.....</u>	<u>8</u>
<u>SUMMARY OF MCQS & CONFIDENCE MATRIX SCORES PRE AND POST COURSE</u>	<u>9</u>
<u>PARTICIPANT COMMENTS</u>	<u>9</u>
<u>EVALUATION: SWOT ANALYSIS – STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS</u>	<u>10</u>
<u>STRENGTHS</u>	<u>10</u>
<u>WEAKNESSES</u>	<u>12</u>
<u>OPPORTUNITIES</u>	<u>13</u>
<u>THREATS</u>	<u>13</u>
<u>OBSERVATIONS AND RECOMMENDATIONS.....</u>	<u>14</u>
<u>FOLLOW-UP PLAN.....</u>	<u>14</u>
<u>ACKNOWLEDGMENTS AND THANKS.....</u>	<u>14</u>

Executive Summary

This Primary Trauma Care course was hosted by both Hôpital de la Convention Baptiste d'Haïti (HCBH) and the UK charity Hope Health Action (HHA). As the first PTC course in the North of Haiti, the faculty training team were starting from scratch in this region, with the ambitious vision of running a 2:1:2 course at HCBH, Cap Haïtien, Haiti.

The course was highly attended, a combined total of 48 participants over the first and second two-day courses successfully completed their PTC certification. Twelve participants on the first two-day course went on to complete the instructor training day. Seven of these new instructors assisted in teaching the second two-day course. The faculty training team will return in the next few months to support the new Haitian instructors in running a follow up two-day course.

Key Staff Involved in Planning and Co-ordinating

The course was organised and planned by Hope Health Action, in collaboration with HCBH hospital. The international faculty training team were responsible for the majority of the organisation. The Team Lead acted as Course Co-ordinator and Director and thus required two weeks on-site preparation prior to the course. We hope in the future local staff will take on more significant roles in planning and co-ordination.

Course Participants

The course participants were from HCBH, Hôpital Universitaire Justinien (HUU, local main government hospital) and a private clinic. These hospitals represent the vast majority of healthcare provision in the city of Cap Haïtien. Participants were from a variety of clinical backgrounds, the majority being medical doctors or surgeons. Nurses and ambulance staff were also in attendance.

Course Instructors/Faculty Training Team

The Course Instructors/Faculty Training Team consisted of a multidisciplinary team with a broad skill mix and a collective vast experience in the delivery of clinical teaching:

Course Director, Rob Dalton - Emergency Nurse/ Resus Officer, Surrey, UK

Michelle Joseph – Trauma and Orthopaedic Surgeon, UHCW NHS Trust, UK

Lydia Longstaff - General Surgeon, Basingstoke and North Hampshire Hospital, UK

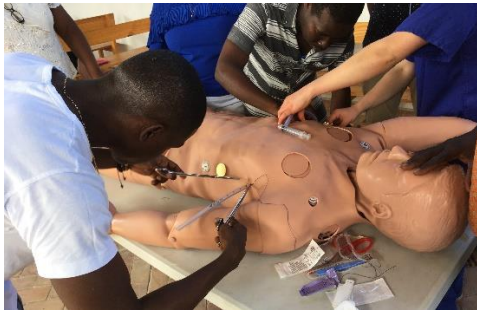
Annie Peskett – Paramedic, Surrey, UK

The team had hoped to have Haitian PTC instructors, recently trained on the MSF led PTC Course in South Haiti, join the faculty, however none were available (see SWOT Analysis).

Advertisement and Media Coverage

Posters were displayed in advance at the hosting hospital, advertising the upcoming courses. The course was publicised on local radio and will be followed up with further coverage.

Course 1: 21st – 22nd January 2019



Chest Drain Insertion- Manikin



Chest Drain Insertion- Goat



Workshop Discussions



Lecture Delivery with translation



Surgical Airway Practice



Log Roll Skill Station



Circulation Skill Station- IO Access



Advanced Airway Skill Station



Teaching Scenarios



Course 1 Certificate Presentation

Successful candidate
names
(Potential Instructors)



1	Jordan Nevelus	Medical Student
2	Larose Carida	Emergency Nurse
3	Dr Jeanty Rose Laure	Head of Rehabilitation
4	Fanfan Oldine	General Nurse
5	Petit Frere Elcie	Rehabilitation Sister
6	Morgan Price	MFK Nurse
7	Nurse Augustine	Emergency Department Sister
8	Nurse Charles	Medical Ward Sister
9	Nurse Mathurin	Surgical Ward Sister
10	Dr Cherubin Wilton	Head Orthopedic Surgeon
11	Alette mondesir	Nursing Education
12	Dr Cherubin Wilton	Orthopedic Surgeon
13	Alette mondesir	Nursing Education
14	Dr Junior	Medical Doctor
15	Dr Alcima Guynel	Orthopedic Surgeon
16	Dr Erick Bruno	Orthopedic Surgeon
17	Dr Freud Valery Saint Juste	Medical Doctor
18	Dr Cherenfant Samuel Romuald Jr	General Surgeon
19	Dr Mervil Werly	Orthopedic Surgeon
20	Dr Djenane Devilmna	Medical Doctor
21	Dr Wilberson Charles	Orthopedic Surgeon
22	Dr Alexis Batsheva	Orthopedic Surgeon
23	Dorcine Sainteus	Ambulance / Technician
24	Dr Emmanuel Cyriaque	Orthopedic Surgeon
25	Dr Ifrene Arsene Junior	Orthopedic Surgeon

Instructor Training Day: 23rd January 2019



How to give Feedback



Leading a Scenario



Delivering a Lecture



Instructor Certificate Presentation

Successful
candidate names



1	Miss Augustine	Emergency Department Sister
2	Miss Charles	Medical Ward Sister
3	Miss Mathurin	Surgical Ward Sister
4	Alette Mondesin	Nursing Education
5	Dr Junior	Doctor
6	Morgan Price	MFK Nurse
7	Dr Cherenfant Samuel Romuald Jr	General Surgeon
8	Dr Wilberson Charles	Orthopedic Surgeon
9	Dr Alexis Batsheva	Orthopedic Surgeon
10	Dr Ifrene Arsene Junior	Orthopedic Surgeon
11	Dr Lydia Longstaff	General Surgeon
12	Annie Peskett	Paramedic

Course 2: 24th – 25th January 2019



New Instructor Delivering a Lecture



Clinical Scenarios



Skill Station- Pelvic Binder



Course 2 Certificate Presentation
(plus an extra participant...)

Successful
candidate names



1	Dr Shémida Casséus	Emergency Doctor
2	Guerrier Cassandra	Nurse Student 4th year
3	Lonie Garcon	Doctor
4	E. Innocent Renaud	Doctor
5	Jolene Pierre	Doctor
6	Joane Joseph	Doctor
7	Georges-Arly W. Gédulien	Doctor
8	Anne Duelie Louis	General Nurse
9	Mihajlove Stanley Merveille	General Nurse
10	Rosanna Cherry	Emergency Nurse
11	Miss Etienne	Emergency Nurse
12	Miss St Hilaire	Emergency Nurse
13	Garcon Luther Fara	Nurse Student 4th year
14	Louis Charles Rendlo Vaani	Clinic Doctor
15	Dr Ambrose	Head of Emergency Department
16	Rose Carmene Vincent	Clinic Doctor
17	Antoine Bleyette	Clinic Nurse
18	Charles Woody	Orthopedic Surgeon
19	Alcy Chovel	Orthopedic Surgeon
20	Georges Roselin	Orthopedic Surgeon
21	Cassandra Jean Baptiste	General Nurse
22	Alexis Frisnel	Ambulance Staff
23	Dr Charles Landy	Medical Doctor

Summary of MCQs & Confidence Matrix Scores Pre and Post Course

We collected data throughout our PTC courses to assess the impact of the training on participants' knowledge and confidence in managing trauma patients. The most dramatic improvement was seen in the reported confidence scores. This score was formulated from participants rating their confidence (1-5) in managing a range of example trauma patients at both the beginning and end of the courses. In Course 1, participants showed an average overall confidence increase of 47%, compared to the start of the course. For Course 2 participants demonstrated a similarly marked increase in confidence of 49%.

After completing the courses, both sets of participants also showed an increase in the average participant MCQ scores, compared with the same questions assessing their knowledge at the start of the course. For those showing improvement in their scores, an average improvement in score of 17% was seen in Course 1 and 25% in Course 2.

The confidence matrix of instructors at the start of the instructor course showed an average overall confidence of 53.83% vs. the post-course confidence matrix of 90%. This is a significant increase of 36.17% overall confidence.

New instructors also stated a specific confidence level of 91.4% to run their own PTC course (a 34.4% increase from the pre-course matrix).

Participant Comments

As part of the post-course feedback, candidates were asked to comment on what aspect they had found the most useful. The most common answer was the ABCDE/systematic approach to trauma patients, followed by chest drain insertion, airway intubation and communication skills.

We also asked candidates what they would change in their trauma management as a result of this course. The ABCDE/systematic approach was again the most common response. Many also commented on their increased understanding of mechanism of injuries and the resulting physical trauma. Other highlights include immobilisation

techniques (including splinting), neurological examination, their management of paediatric or pregnant trauma patients, and the importance of good communication and teamwork.

“This traineeship was very practical; it will help us to save more lives”

Orthopaedic Resident

Evaluation: SWOT Analysis – Strengths, Weaknesses, Opportunities and Threats

Strengths

- **Experienced MDT faculty training team.** Course director (CD) has previously worked in Haiti, with their main job in the UK being training and development of medical professionals. CD travelled out 2 weeks before the courses to set up and prepare. The whole team stayed locally and their sole priority was the course. Faculty had pre-course meetings in the UK and extensive pre-course planning and communication, including input from experienced PTC instructors in the UK.
- **Venue.** The course training venue was the new hospital chapel, an award winning building that allowed a large space, with the benefit of cool air and shade (see picture ->).
- **Equipment.** The team received donated training resources from UK hospitals. A £15,000 manikin and £1000 airway head were donated without charge specifically for PTC use and sent out via container 6 months before the course. Other materials brought out by the team have now been inventoried and donated to the hospital as resources for future PTC courses.
- **Logistics.** All registered participants were emailed materials and invited to a WhatsApp group several weeks before the course, which allowed for relationships and



investments to grow. Each were also given a hard copy of the manual on the first day of training.

- **Strong instructor candidates.** Heads of departments and senior staff attended the course, which demonstrated leadership as well as providing a strong cohort of trainee instructors who were invested in the course.
- **Medical translators.** We had two experienced translators working for us to enable the course to be delivered in French Creole. Some of the trainee instructors also spoke good English which was helpful for providing additional translations, particularly in small group sessions.
- **Senior candidates** collaborated very effectively with the faculty team and other candidates, even before being nominated as instructor candidates, to ensure consistent and inclusive understanding for all candidates.
- **Candidate investment.** The course was over-subscribed. Punctuality increased significantly over the course and the second course started exactly on time, despite external challenges.
- **Good preparation of new instructors.** USB sticks were given for those performing lectures with their power-point presentation slides pre-loaded to facilitate overnight practice.
- **Prayer.** As a Christian mission hospital, the ethos of prayer was an overarching strength to these courses. The faculty training team met for morning prayer and shared news with prayer supporters around the globe.

Weaknesses

- **Lack of grant funding.** Various grant applications for course funding were unsuccessful. The costs to cover the course came from within the faculty training team and the hosting charity Hope Health Action.
- **1st Course disruptions** due to lateness and clinical responsibilities. A notable example of this was one participant, who had sporadic attendance due to clinical responsibilities – understandable when he is the only attending/ consultant orthopaedic surgeon for the entire city. Other clinicians also struggled to be on time having finished night on-call shifts etc.
- **Data collection at irregular intervals.** This is linked to the above point and meant that data capture of MCQ's and confidence matrices at the very start and end of the course was disrupted.
- **Late increase in candidate numbers.** This meant that skill stations took longer due to lack of surplus equipment available and increased the challenge of prioritising persons who would actually be performing the skill in real life without diminishing the enthusiasm of others.
- **Collateral effects of the fuel crisis.** In Haiti, at the time of the course, there was a fuel shortage with widespread disruption of transportation. This exacerbated lateness, as well as having the knock on effect of no power in many participants homes (no national grid exists; homes rely on generators if they can afford one). Even having a charged phone was a struggle on the days of the course. We offered a phone-charging point during the courses to help participants with this particular challenge.
- **Lack of digital access among some candidates.** Some do not have access to a computer at home. However, others did ask a friend/colleague and some managed to get materials printed before the course.

Opportunities

- **Opportunity for future course highly likely.** 12 new instructors were trained in the instructor training day. New instructors were proactively enquiring how they can formally train their residents in PTC. As a result of this, we see future prospects for surgical residents at the government hospital to be trained in PTC as part of their training.
- **Inter-hospital networking.** Participants and new Instructors from both courses now share a common experience in clinical training and there are opportunities for a more standardised approach to managing trauma patients across different sites.
- **Opportunity given for HCBH to see the vision of becoming a training hub.** This fits into a wider long term plan for the hosting hospital to become a training hub for clinicians in the region.
- **Faculty are keen to remain involved** in this project and are planning a follow up course within the next few months, working alongside the new Haitian instructors.

Threats

- **Political unrest.** In previous months the country had experienced significant political unrest, with widespread riots- making all travel impossible. This threat did hang over the course, but thankfully there was peace while the team were in the country.
- **Unreliability of access to printing locally.** Due to the fuel crisis, the main printing shop in the city lacked reliable power. Furthermore, their main copier broke down. This made printing any additionally required materials during the time of the course challenging and expensive.
- **Physical distance for some candidates.** Some travelled from over 2 hours away on dangerous roads with unreliable transport.

- **Inherent potential risks of Haiti.** As well as dangerous road travel, risk of natural disaster or violence is an ever-present threat inherent to this area of Haiti. Hope Health Action put in place risk assessments to keep the team safe during this time, but it was still a potential threat to course delivery.

Observations and Recommendations

Following on from the SWOT analysis above, as a faculty team we strongly suggest a repeat course in the next few months, working alongside the new Haitian instructors. Plans are already coming together for this to become a reality. We recommend continuing the strengths, while working to address the weaknesses and manageable threats.

Follow-up Plan

Course 1, Course 2 and the new instructors continue to be in a WhatsApp group together, allowing for follow-up support and dialogue. Once a date is set for the follow up course the new instructors will be invited to take on more responsibility and roles of leadership for this course.

Acknowledgments and Thanks

A massive thankyou to Hope Heath Action (www.hopehealthaction.org) and HCBH hospital for hosting and facilitating the team in the logistics of the course.

Thank you also to the PTC Foundation, notably Annette Clack, Tarek Boutefnouchet, Nigel Rossiter and Charles Clayton who all inputted support to make this course a reality.