

# Africa Clubfoot Training Project

## Basic Ponseti Provider Course

23-24 September 2015

## Advanced Ponseti Provider Course

25 September 2015

# COURSE REPORT



## 1. Executive Summary

The first Africa Clubfoot Training project pilot course was held at the CURE Ethiopia Children's Hospital, Addis Ababa on 23-25 September 2015. The course consisted a two-day Basic Ponseti Provider Course (BPPC) and a one-day Advanced Ponseti Provider Course (APPC) to train 31 local health workers working in and around Addis Ababa. The courses included interactive lectures and practical workshops on examination, casting, bracing and tenotomy. The second pilot course of these materials will take place in January 2016, and will include a Train The Trainer (TTT) course to train more local trainers and build training capacity across the region.



## 2. ACT project objectives:

- Produce a standardized, tested Ponseti providers training course (basic and advanced)
- Produce a complementary, standardized, tested Train The Trainers course in Ponseti and clubfoot management, including mentoring component.
- Train a cadre of health workers in Ethiopia as Ponseti providers, through piloting the provider course
- Train specialists from approx. 16 countries in sub-Saharan Africa as Ponseti trainers, through piloting the TTT course



### 3. Background to course materials:

The ACT BPPC and BPPC are based on previously developed training materials including the Global HELP Red Book, the GCI Ponseti for clubfoot training materials, the CURE clubfoot training resources and many others.

Stakeholder input: The ACT Provider Courses Working Group have developed these materials to incorporate:

- a. Survey data and key informant interviews from consultation with key trainers in the region
- b. Feedback from members of the UK Clubfoot Consensus Group (UKCCG) who are reviewing the scientific and clinical content
- c. Feedback from members of a Africa Technical Advisory Group (ATAG) set up to review the draft course materials for suitability for Africa and training methodology



### 4. Faculty and organizing team

Mr Guy Atherton, Consultant Orthopaedic Surgeon, Bristol, UK

Mrs Debbie McMillan, Physiotherapist, Bristol, UK

Ms Tracey Smythe, Physiotherapist, London, UK, chair of ACT Provider Course Working Group

Mr Steve Mannion, Consultant Orthopaedic Surgeon, Blackpool UK, CBM Advisor

Professor Chris Lavy, Consultant Orthopaedic Surgeon, Oxford UK, ACT project director, course leader

Dr Birhanu Ayana, Consultant Orthopaedic Surgeon, Black Lion Hospital, Addis Ababa & Medical Director for Ethiopia national clubfoot programme

Dr Peter Klungsøyr, Consultant Orthopaedic Surgeon, Norway, regular visiting clubfoot trainer to the Ethiopia clubfoot programme

Mr Michiel Steenbeek, Physiotherapist, CBM Advisor Physical Impairment and Rehabilitation

Ms Linda Hansen, CURE Clubfoot – regional director for Africa, based in Lusaka

Dr Tim Nunn, Consultant Orthopaedic Surgeon, CURE Ethiopia Children’s Hospital

Mrs Marieke Dreise, Uganda Clubfoot Project Coordinator (1999-2003 and 2005-2007) – observer

Miss Grace Le, Oxford, ACT project manager, UK organizer for this course

Mr Adugna Hirpa, CURE Clubfoot Ethiopia programme manager, local organizer for this course

Mr Endashawu Abera, Physiotherapist, CURE Clubfoot Ethiopia programme, local organizing team



## 5. Trainees

The participants for the courses were selected and invited by the CURE Clubfoot Ethiopia program. Those attending the Basic course had received no or minimal previous training, whereas those attending the Advanced course had received some previous Ponseti training and had experience of managing clubfoot.

Basic Ponseti Provider Course				
First name	Last name	M/F	Job	Work place
MIDASSO	BUTA	M	PHYSIO	AMBO HOSPITAL
BERIHU	BRHANE	M	PHYSIO	AXUM ST MERRY HOSPITAL
MELISEW	MEKIE	M	PHYSIO	DEBRELABANOS HOSPITAL
ABAYNEH	AYELE	M	IESO EM. SURG, OBYG	MOTA HOSPITAL
ALMAW	BITEW	M	DOCTOR	FHRH BARHIR DAR
HIWOT	TESFAYE	F	NURSE	BLH
TADESSE	ESAYAS	M	ORTH. RESIDENT	BLH
HANNA	EMERU	F	NURSE	AMBO HOSPITAL
ENGDAYE	KASSA	F	PHYSIO	FELEGE HIWOT REFERAL HOSPITAL, BARHIR DAR
TENAYE	OSMAN	F	NURSE	BLH
GEREMEW	ASTATKIE	M	EM. SURG OFFICER	FINOTE SELAME DISTRICT HOSPITAL

ELSABET	MESFIN	F	NURSE	FINOTE SELAME HOSPITAL
GEBREKIDAN	WUNE	M	NURSE	BLH
EJIGAYEHU	MATHEWOS	F	.	.
TEWODROS	GIRMA	M	PHYSIO	N/E/M/M/HOSPITAL HOSSANA
SILESHI	AYHUALEM	M	PHYSIO	DEBREMARKOS REFERAL HOSPITAL
TEKLE	TEWELE	F	NURSE	AXUM GENERAL HOSPITAL
WULETAW	WONO	M	PHYSIO	YIRGALEM GENERAL HOSPITAL
TEWODROS	MEHERET	M	PHYSIO	GONDAR UNIVERSITY HOSPITAL
MURITS	G/SILASSIE			

Advanced Ponseti Provider Course				
First name	Last name	M/F	Job	Work place
MAHLET	BEKELE	F	NURSE	BLACK LION HOSPITAL
FREHIWOT	MOLLA	F	NURSE	BLACK LION HOSPITAL
ESKINDER	KEBEDE	M	ORTHOPAEDIC RESIDENT	BLACK LION HOSPITAL
ASHENAFI	GIRMA	M	PHYSIOTHERAPIST	CURE HOSPITAL
LEUL	MERID	M	ORTHOPAEDIC RESIDENT	BLACK LION HOSPITAL
TEWODROS	ASEGIE	M	ORTHOPAEDIC RESIDENT	BLACK LION HOSPITAL
FASIKA	BEKELE	M	PHYSIOTHERAPIST	CURE HOSPITAL
DAGMAWI	TAMRE	M	PHYSIOTHERAPIST	GRAREBET HOSPITAL / BUTAJIRA
NEGESSE	ABDI	M	.	ASELLA HOSPITAL
DR KAGNEW	WUBISHET	M	ORTHOPAEDIC SURGEON	ASELLA HOSPITAL
ASELEFECH	GELAN	F	IHO PUBLIC HEALTH	ST LUKE WOLLISO



## 6. Patients

Patients from CURE Ethiopia and Black Lion Hospital were seen:

- 48 patients were seen (61 feet)
- 7 for brace review (10 feet)
- 4 for tenotomy (5 feet)
- 34 for serial casting (40 feet)
- 3 for other consultation (6 feet)



## 7. Assessment

The level of confidence in Ponseti management of clubfoot was assessed at the start and end of the training course through a questionnaire based on common scenarios. Trainees were also given a multiple-choice questionnaire to assess their baseline level knowledge of clubfoot management to compare with after the course. There was a significant increase in level of knowledge and confidence in the basic course trainees after the course compared with before (33% improvement). The monitoring and evaluation tools will be further developed before the next training course.

All participants received a certificate of attendance.



## 8. Feedback

The faculty team met for a debrief session at the end of each day of training, and detailed feedback was collected to inform the next phase of revising the course materials. The main themes that arose were:

- The pilot of the basic provider course for Ponseti management gave an opportunity for lessons to be learned and allowed expert trainers to clarify the further development of the basic provider course.
- Areas for further development:
- Opportunities for group and pair work will be increased to allow for greater exchange of experiences and problem solving.
- The content will be refined to ensure fluidity of presentation and continue to pitch the information at a basic level whilst maintaining a variety of teaching techniques through hands on practice and increased media modalities.

- The importance of a partnership between parents and the health provider will continue to be emphasised throughout the training. Opportunities to discuss practical opportunities to improve the partnership will be increased.

## 9. Next steps

- **Basic course:** The ACT provider courses working group is adapting the basic course content in the light of the feedback from the pilot course, and will develop a participant manual.
- **Advanced course:** Further modules are being added to the advanced course so that it will become a one-day course and content will be reviewed by the Africa Technical Advisory Group members.
- **Train The Trainer course:** The working group met to agree a course outline in September 2015, and the course materials will be developed for a first pilot in January.
- The TTT course, Basic course and Advanced course will be piloted in 4 x one-week pilots throughout 2016, in both English and French.
- The final course materials will be published by early 2017 for partners to use.



## 10. Other activities

Michiel Steenbeek met with the orthotics team at CURE Ethiopia to advise them on bracing.

Peter Klungsøyr stayed on for two weeks in Addis Ababa to support the Black Lion and CURE clubfoot clinics.

## 11. Acknowledgments

This training course is part of the **Africa Clubfoot Training (ACT) Project**, which is supported by the **Tropical Health Education Trust** as part of the **Health Partnership Scheme**, which is funded by the **UK Department for International Development**.



We would particularly like to thank all of our main project partners (University of Oxford, CURE Clubfoot, CURE Ethiopia Children's Hospital, Global Clubfoot Initiative and CURE International UK) for their valuable support for this training initiative, as well as the many partnering organisations and institutions who have greatly contributed to this training course, including CBM, Black Lion Hospital and the UK Clubfoot Consensus Group. We are very grateful to the local team who organised the course, including Dr Birhanu Ayana, Adugna Hirpa and Endashawu Abera and Dr Rick Gardner. We could not have run this course without the experienced team of volunteer clubfoot trainers who gave up their time to teach on this course, and all those who advised and contributed to the development of the current course materials through consultations leading up to the course.

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December 2015

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Appendix 1: Basic Course Timetable

## ACT Basic Ponseti Provider Course (BPPC) Teaching Schedule

Location: CURE Ethiopia Children's Hospital

### BPPC DAY ONE – WEDNESDAY 23 SEPTEMBER 2015

Time	Duration	Module/activity
08.00-09.00	60"	Registration
09.00-09.15	15"	Welcome and Introductions
09.15-09.30	15"	Pre-course MCQ
09.30-10.00	30"	1. Introduction to clubfoot and Ponseti
10.00-10.45	45"	2. The CAVE story
10.45-11.15	30"	TEA BREAK
11.15-11.55	40"	Practical demonstration: ASSESSMENT and treatment planning
11.55-12.40	45"	3. How and why Ponseti manipulation works
12.40-13.25	45"	LUNCH
13.25-13.55	30"	4. Applying Ponseti casts
13.55-14.35	40"	Practical demonstration: CASTING
14.35-15.55	90"	Practice session: RUBBER FOOT CASTING
15.55-16.25	30"	TEA BREAK
16.25-17.05	40"	5. When to stop and re-think treatment
17.05-17.15	10"	CLOSE DAY 1

### BPPC DAY TWO – THURSDAY 24 SEPTEMBER 2015

Time	Duration	Module/activity
08.00-08.20	20"	6. Review the CAVE story
08.20-08.50	30"	7. Tenotomy and when to do it
08.50-09.30	40"	8. Bracing and relapse
09.30-10.00	30"	TEA BREAK
10.00-13.00	180"	PRACTICAL SESSION (with patients) 1. PIRANI SCORING and CASTING
13.00-13.30	30"	LUNCH
13.30-15.00	90"	PRACTICAL SESSION (with patients) 1. BRACE FITTING 2. TENOTOMY
15.00-15.20	20"	TEA BREAK
15.20-15.35	15"	Post-course MCQ
15.35-16.05	30"	9. Clubfoot clinic set up and measuring quality
16.05-16.35	30"	Closing session including certificates of attendance

## Appendix 2: Advanced Course Timetable

### Advanced Ponseti Provider Course (APPC)

Location: CURE Ethiopia Children's Hospital

FRIDAY 25 SEPTEMBER 2015

Time	Duration	Session
08.00-08.15	15	Registration
08.15-08.30	15	Welcome
08.30-08.45	15	Pre-course MCQ
08.45-09.30	45	<b>Module 1: The Atypical or Complex Clubfoot</b>
09.30-10.15	45	<b>Module 2: Treating the older child</b>
10.15-10.30	15	Coffee
10.30-11.00	30	<b>Module 3: Recognising and treating recurrence of clubfoot deformity</b>
11.00-12.00	60	<b>Questions and discussion</b>
12.00-13.00	60	Lunch
13.00-14.00	60	<b>Case reviews and discussion of Basic Ponseti Provider Course core skills</b>
14.00-14.15	15	<b>Closing session</b>