# Global Clubfoot Project 2007-2009: Summary of Outcomes

Rosalind Harrison<sup>1</sup> Norgrove Penny <sup>2</sup>Andy Mayo<sup>3</sup> Jose Morcuende<sup>4</sup> Chris Lavy<sup>5</sup> <sub>1</sub>Institute of Child Health London <sub>2</sub>CBM International Germany <sub>3</sub>Cure International Philadelphia <sub>4</sub>University of Iowa <sub>5</sub>University of Oxford

#### Introduction

The Global Clubfoot Project (GCP) was a US \$ 1million collaborative programme between three organisations: CBM, Cure International and the Ponseti International Association (PIA). These non-governmental organisations (NGOs) came together in 2007-2009 in order to address the problem of clubfoot in 10 low and middle income countries through a two-year programme.

#### **The Problem of Clubfoot**

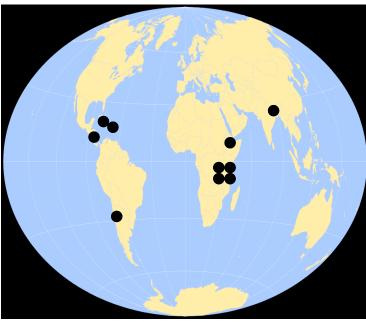
Due to lack of awareness and poor access to healthcare most children with clubfoot in developing countries do not receive treatment. Left untreated, clubfoot results in severe disability, causing pain and difficulty in walking. Many individuals with untreated clubfoot end up living as beggars on the streets.

The Ponseti method is a means of treating clubfoot through manipulation and casting, followed by a percutaneous Achilles tenotomy and bracing of the foot. When applied at an early age (preferably under 2 years), by skilled practitioners, this method results in very good treatment outcomes. In developed countries children with clubfoot can grow up with almost no functional difficulties following treatment.

#### **The Global Clubfoot Project**

The GCP aimed to increase the number of children diagnosed and treated in the 10 countries where it operates whilst building the capacity of the local health teams. In this, it has brought hope to thousands of children with clubfoot and their families.

#### The 10 Countries



Dominican Rep./
Haiti,
Honduras
Paraguay
Ethiopia
DRC/Rwanda
Malawi
Tanzania
Zambia
Nepal

Clubfoot in these 10 countries was targeted through the following strategies:

**Capacity building**: setting up/supporting country clubfoot programmes, training practitioners to manage clubfoot using the Ponseti method, decentralising clinical services to increase access throughout the country.

**Awareness raising**: amongst communities and health professionals about clubfoot and services available.

**Funding**: for all supplies of materials necessary for managing clubfoot.

**Building Partnerships**: with government and other stakeholders, integrating clubfoot management into existing services.

#### **The Evaluation**

In order to evaluate the GCP we aimed to measure: What the **impact** of the GCP has been, What lessons can be learned,

How it can be **improved** in the future.



#### **Methods**

**Self-reported data** from all ten countries on numbers of practitioners trained, clubfoot treatment centres in operation and patients treated

Interviews with those in coordinating and beneficiary roles for each country project (12 in total), with practitioners trained to treat clubfoot in Ethiopia and Laos (8-10 from each country) and with parents and guardians of children enrolled for treatment (10 each from Ethiopia and Laos).

#### **Impact of The Global Clubfoot Project**

The GCP has been very successful in most of the countries it is working in. When the project started, the organisers aimed to treat 2,500 children over a two-year period. More than three times this number were enrolled for treatment.

Several different measures were used to assess impact. Following in the next two columns are some areas that the evaluation looked at.



#### **Country Data**

**Table One:** Summary of country data 2007-2009.

Country	Patients enrolled for treatment	Clubfoot clinics operating	Practitioners trained
Dominican Republic/ Haiti	566	9	24
Honduras	278	19	35
Paraguay	56	unknown	10
Ethiopia	1677	16	97
Malawi	1446	26	86
D.R.Congo/ Rwanda	1327	23	108
Tanzania	75	unknown	21
Zambia	1076	9	57
Nepal	936*	3	152
Laos	268	5	44
Total	7705	112	634

\*Contains some estimated data

### **Capacity Building**



#### More than 630 practitioners have been trained.

Project coordinators reported that many practitioners are highly skilled at treating clubfoot and very motivated. Many felt that training in the Ponseti technique has given them the tools to treat clubfoot effectively for the first time.

#### Increasing the number of clinics.

In many countries this is the best way to make treatment accessible whilst raising awareness. Country projects have been successful in forming partnerships with the Ministry of Health and other organisations in order to establish new clubfoot clinics by utilising their facilities.

Raised awareness results in patient numbers rising rapidly. Methods include: outreach programmes, posting of leaflets and posters, mass media (particularly local radio stations) and educational sessions for health workers. Increasing awareness amongst health workers is particularly important at this stage in ensuring that more young children are referred to clinics.

#### **Change in attitudes**

In almost all countries, the GCP has resulted in a dramatic shift in the predominant methods for treating clubfoot. Coordinators and practitioners described how previously, a mixture of ineffective methods were being used with poor results. In many locations this change of attitudes has affected the most senior orthopaedic and paediatric health care providers, resulting in the Ponseti method now being the treatment of choice for children with clubfoot.

## **Disability prevention**

For the children enrolled in the GCP, the Ponseti method is not only a treatment but hope of a new life free from disabling pain, deformity and the stigma of disability. Parents and guardians repeatedly expressed the joy and gratitude they felt when they found there was treatment available for their child. This is particularly true as the service is provided at no cost to children's families, many of whom would never be able to afford it.

## **Case Studies of Hope**

This eight year old girl (left) is attending the GCP clinic in Vientiane, Laos with her mother and sister. As she only came to the clinic when she was eight years old she was treated first with Ponseti manipulation and casting followed by a relatively small surgical procedure. This course of treatment is typical for those who access treatment when they are too old to be treated fully using the Ponseti method.



Her mother described how they had attempted to find treatment since her daughter's birth, trying traditional massage and even going to a hospital where surgery was planned. Despite selling one of their cows this surgery had to be cancelled because they could not afford to pay. She described her distress about her child's disability and relieved she was when she heard that free treatment was available through a local organisation supported by The Global Clubfoot Project.

This child (above right) who has just had fresh casts applied at the main clubfoot clinic in Vientiane, Laos also did not access treatment until she was older

Her parents, too, took her to the district hospital seeking



treatment for her clubfoot but were told there was no treatment available. She and her family travelled for more than six hours on the bus to reach the Global Clubfoot Project supported clinic to have her casts applied. Staff at the clubfoot clinic believe this child's deformity can be completely corrected using the

Ponseti method despite the fact that she is older

The mother of this child (below) was told by the



community midwife who delivered the boy the clubfoot deformity was a 'gift from God' and that she should simply keep him at home. She remained determined to find treatment eventually heard, through word of mouth networks, of another child who had been successfully treated at a GCP clinic.

## **The Future**

This evaluation shows that the GCP's targeted support has been beneficial in setting up and supporting clubfoot projects. Country projects should start to become more independent as they develop expertise, conducting their own training and awareness raising activities. Links with Ministries of Health and other stakeholders should be further built-up so that clubfoot services can be integrated into existing facilities. In the future it will be important to strengthen existing projects' capacities and also offer assistance to those in other countries who have a concern for children with clubfoot.

For more information about the Global Club Foot Project please contact: Rosalind Owen on rozharrison21@hotmail.com





