

Clubfeet in Uganda - Quandary to Opportunity: The Uganda Sustainable Clubfoot Care Project



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Least Developed Nations

- Income <\$1 per day
- Life expectancy 45 yr
- <5 Mort = 125/1000

Population

- 28 million (85% rural)
- 50 % under age 15
- 50 births per thousand
- 1.2 million births per yr



The Quandary of the Clubfoot in Uganda

- Too many clubfeet
 - 1200 children annually
 - 10,000 neglected children (Atria 94)



- Too few resources
 - <20 orthopaedic surgeons
 - Surgical correction for all simply impossible



The Quandary of the Clubfoot in Developing Nations

- Two thirds of the worlds population lives in developing countries
- 75% of all doctors reside in 5 countries (Australia, Canada, Germany, The United Kingdom, USA)
- 80% of all orthopaedic surgeons in the world practice in 26 “developed” nations
- If Canada had same orthopaedic surgeon to population ratio as Malawi-BC would have 1 surgeon

Levine’s Principles

- “First, as citizens of an increasingly global society, we have a responsibility to become educated about the extent of the problem. Only if we are informed can we understand the problem and begin to devise and provide effective solutions. ”

Can We Make a Difference?

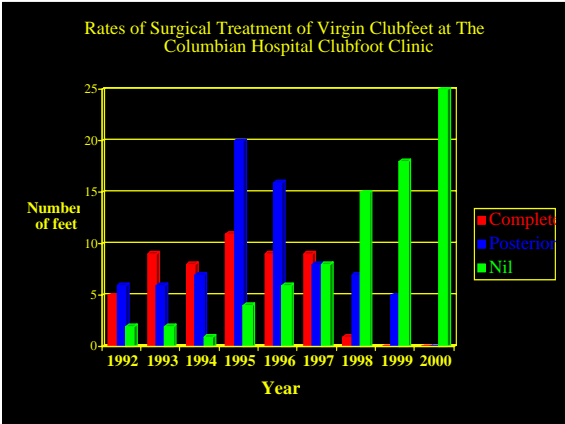
Alan M. Levine MD
Editorial Journal American Academy of Orthopaedic Surgeons Sep 2001

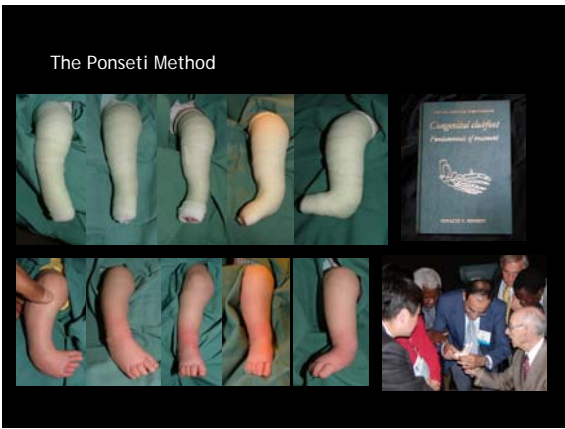
Levine’s Principles

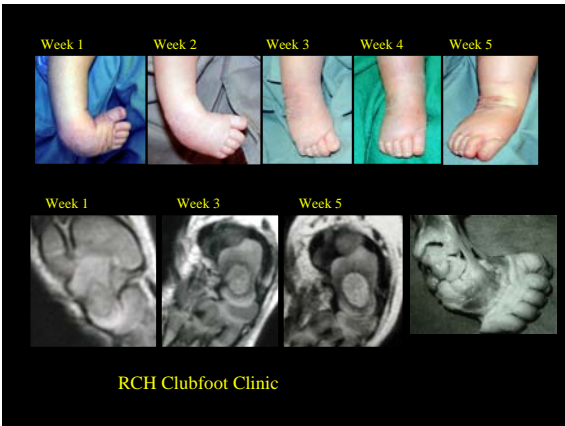
- “Second, it is our responsibility to seek out workable solutions. It has become apparent that one of the most useful approaches is to become involved in the education of local health-care workers in techniques that are economically and socially feasible for their society. ”

Can We Make a Difference?

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Excellent results reported from Iowa...

- Short Term - 235 out of 236 feet corrected
- Long term - 78% good/excellent at outcome 25 years

Cooper and Dietz. JBJS 1995

.....& Elsewhere!

			Correction Rates
Herzenberg	Baltimore	27 feet	96%
Lehman	New York	50 feet	90%
Dobbs	St Louis	95 feet	100%
Frick	S Carolina	30 feet	100%
Crawford	Auckland	50 feet	92%
Ganjwala	India	34 feet	97%

The Uganda Clubfoot Project (1999-2003)

- Partners Building Consensus
 - Ministry of Health
 - Makerere Orthopaedic Dept
 - Children's Orthopaedic Rehabilitation Project (UG)
 - Rotary Foundation
- Project Goal = Make available to every child born with clubfeet timely treatment with the Ponseti Method



Dr Norgrove Penny



What Happened (in retrospect)

.... A winning recipe

1. Understand the problem & find a workable Solution. (Levine's principles respected)
2. Well defined goal.
3. Consensus of all stakeholders
3. Local champions
4. Funding secured

The Workable Solution

- Build Capacity to detect deformity
 - Education Posters
 - Sensitisation of administrators



The Workable Solution

- Build Capacity to treat deformity
 - Train Trainers
 - Upgrade clubfoot skills in every district hospital
- Collect data
 - Pilot centres



Tenotomy



The Steenbeek Foot Abduction Brace (SFAB)

- Maintains correction
- 3 months full time
- 2-4 yr. night time
- Bar as wide as shoulders
- Externally rotate 70 degrees
- Dorsiflex 10-15 degrees
- Heelcup
- Failure to wear is the most common cause of recurrence



\$ 1.8 million Uganda Sustainable Clubfoot Care Project funded by the Canadian International Development Agency.

Media Release | Mar. 16, 2004

CANADA AND UBC SUPPORT SUSTAINABLE DEVELOPMENT IN AFRICA AND THE AMERICAS

UBC researchers have received a \$5.3 million contribution over six years from the Canadian International Development Agency (CIDA) to support three international development projects by UBC and its partner institutions in Uganda, South Africa and Ecuador.

Funded by CIDA's University Partnerships in Cooperation and Development (UPCD) Program, the projects draw upon Canadian university expertise to help build the capacity of education and training institutions in developing countries to address their sustainable development priorities.

- UBC
 - Dr Richard Mathias, Dept of Health Care & Epidemiology
 - Dr Shafique Pirani, Dept of Orthopaedic Surgery (Project Director)
 - Dr Nargrove Penny, Dept of Orthopaedic Surgery
- Makerere University & Ministry of Health
 - Mr Edward Naddumda, Head of Orthopaedics (Project Director Uganda)
 - Mr Ben Mboonye, Mulago Clubfoot Clinic
 - Professor Joseph Konde-Lule, Institute of Public Health
 - Dr Jackson Amone, Senior Medical Officer MOH
 - Dr Fulvio Franceschi, Children's Orthopaedic Rehabilitation Unit

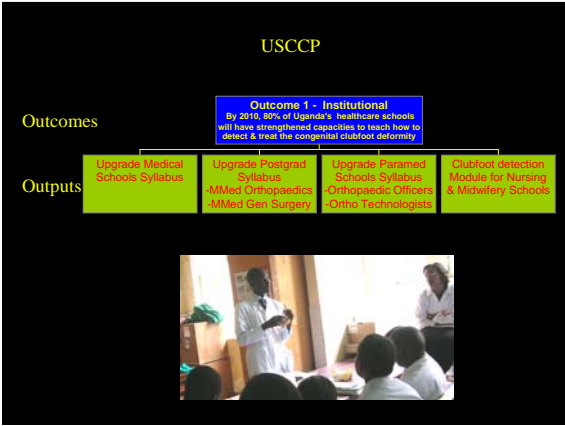


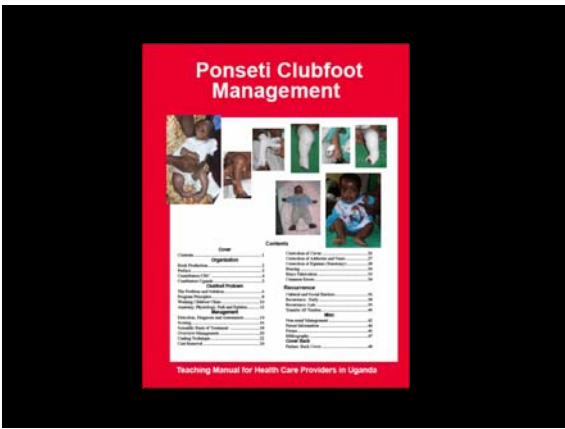
The Uganda Sustainable Clubfoot Care Project: The Team

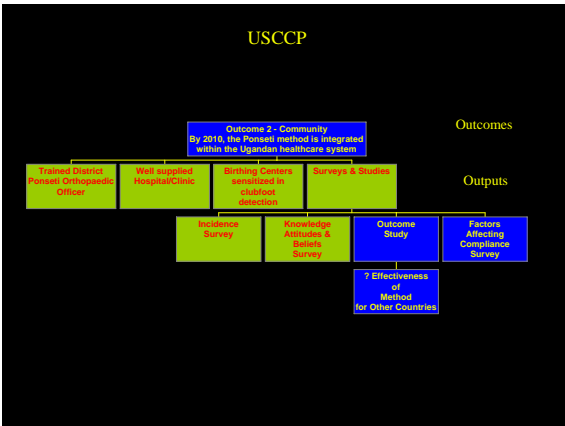
Speech of Ugandan Vice President Prof Bukenya at Project Launch 22 Feb 05

- "I therefore recommend that the Ministry of Health adopt this cheaper method of treatment of congenital clubfoot in all its hospitals.
- Surgery should only be done when manual manipulation and casting fails.
- Uganda will be a role model in championing this method of treatment of congenital clubfoot deformity in the region.
- I am proud to be associated with this project."









The Research Team


Understanding Clubfoot in Uganda: A rapid ethnographic study

DRAFT
Final Report

J. Konde-Lule,¹ S. Neema,² S. Gitta,³ T. McElroy,⁴

¹Makerere University Institute of Public Health
²Makerere University, Department of Sociology
³Curtin University

September 26, 2005.



1. Defining local terminology for this congenital condition

Kaifuulanenge

Kigoka


Obugere Bwe bigiko


Mulema

Koloba

Oburema

bwobuzarwa





Obumuga

Iseja

Clubfoot

Kilema



Zanufuta

Ekimuga

Yalemala ebigere

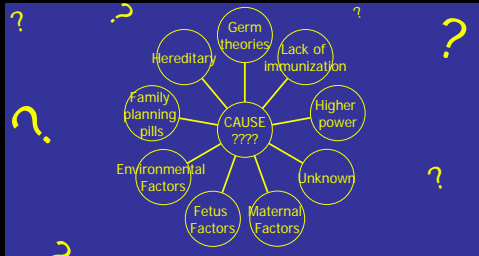
Balongo

The take home message...

**A picture is worth a thousand words.....
and models work too!**

2. Local explanatory models and theories of causation



3. Appropriate methods of knowledge dissemination....

- Media
- Local council leaders
- Practitioners
- Posters
- Broad sensitization/public address



