Global Surgical Volunteerism:
Congenital Heart Surgery in Nicaragua, Latin America and Beyond

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I have no disclosures.
Overview

• Why should I volunteer (the need)?
  – Is it realistic to do heart surgery in poor countries?
  – Do we really make any difference?
• Why should I volunteer *(what’s in it for me)*?
• A few comments from “the other side”
• What we need to do better
A word about me...

• I live in Nicaragua.
• While not strictly a volunteer, I live on a salary that is less than 25% of what I made in my last year of practice in the US, and less than I made as a fellow in 1999.
• I was originally only going to do this for two years. Seriously.
• I am having fun.
Why am I still doing this?

- Because of the kids
Why am I still doing this?

- Because of the parents
Why am I still doing this?

• Because of the team
“By the numbers”: the need

Incidence Surgical CHD/Surgeon ≤140
Diagnosis and treatment of all children born with CHD possible, although not guaranteed.

Incidence Surgical CHD/Surgeon >140
The demand for surgical treatment seems to exceed the availability of services.

So how many kids are there who need surgery? Are there enough surgeons?
Demand / Resources availability of CHD Surgical Services

Group I
(≤140)

Group II
(>140)

Group III
(No CHD Surgeon)
It all comes down to kids and surgeons...

- More than 800,000 children are born every year who need heart surgery to survive
- More than 90% live in places where there is limited or no access to surgery
- There is an estimated global deficit of 3700 pediatric heart surgeons
What can we do?

• Operate on kids: “I can help this one,” said Bl. Mother Teresa of Calcutta

• Train surgeons and develop programs: exponential effect.
How we can help: Models of Assistance

1. Standard pediatric cardiac service missions trips: send medical teams repeatedly to the same site.
2. Senior level surgeon lives in-country year round.
3. A small team (6) of specialists resides in-country 48/52 weeks.
Pediatric Cardiac Assistance Sites Currently Active

◆ Model 1: Belarus, Dominican Republic (2), Ecuador, Egypt, Honduras, Ukraine, Macedonia, Russia (2)

◆ Model 2: Nicaragua

◆ Model 3: Nasiriyah, Iraq and Benghazi, Libya.
## Does it work?

### Independent Programs

<table>
<thead>
<tr>
<th>Site</th>
<th>Dates of Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beijing, China</td>
<td>2004-2010</td>
</tr>
<tr>
<td>Belgrade, Serbia</td>
<td>1997-2001</td>
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<tr>
<td>Bogotá, Colombia</td>
<td>2002-2010</td>
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<tr>
<td>Hyderabad, India</td>
<td>2009-2011</td>
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<tr>
<td>Kyiv, Ukraine</td>
<td>1994-2011</td>
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<tr>
<td>Lima, Peru (INCOR)</td>
<td>1998-2002</td>
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<tr>
<td>Lima, Peru (Instituto del Nino)</td>
<td>1996-2004</td>
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<tr>
<td>Managua, Nicaragua</td>
<td>1996-2011</td>
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<tr>
<td>Minsk, Belarus</td>
<td>2002-2010</td>
</tr>
<tr>
<td>Nanjing, China</td>
<td>2001-2010</td>
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<tr>
<td>Rawalpindi, Pakistan</td>
<td>2005-2009</td>
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<tr>
<td>Shanghai, China (SCH)</td>
<td>2005-2007</td>
</tr>
<tr>
<td>Zagreb, Croatia</td>
<td>1993-2003</td>
</tr>
</tbody>
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What’s in it for me?

• Every kid has a name, a family, and a story.

• This is Wendy.
What’s in it for me?

• I am putting my talents to the best possible use.
• It’s intellectually stimulating- I see stuff I would never see at “home.”
• I’m changing the world.
Last week on Thursday...
And on Friday
If you go: advice from “the other side”

• We are guests in their hospital and their country.
• It is easy to underestimate the knowledge and experience of the local team, especially if there is a language barrier. Ask lots of questions and be patient, avoid criticisms and don’t make assumptions.
• Be sensitive to cultural issues eg dress, social and religious customs, photography.
What can we do better?

To improve patient care:
Quality assurance: M&M, IQIC

To improve program development:
Communication “us <-> them” - we don’t always have the same goals
Communication “us <-> us” – we need to know what other organizations are doing in the same country
What Can We Do Better?

• To improve academics
  – Curriculum for surgeons, nurses to standardize training
  – Research:
    • Why are some diagnoses more common?
    • Why are some complications more common?
Thank you!!

www.babyheart.org