

Korean Doctors Helping Children with Congenital Heart Diseases from Foreign Countries

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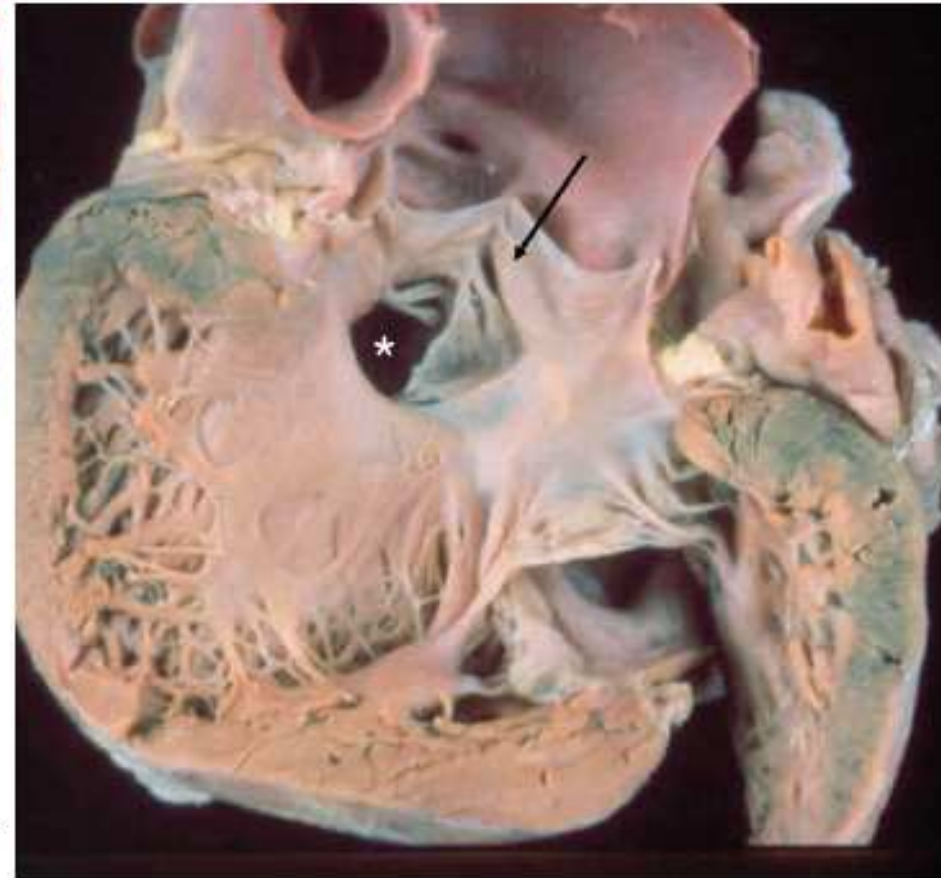
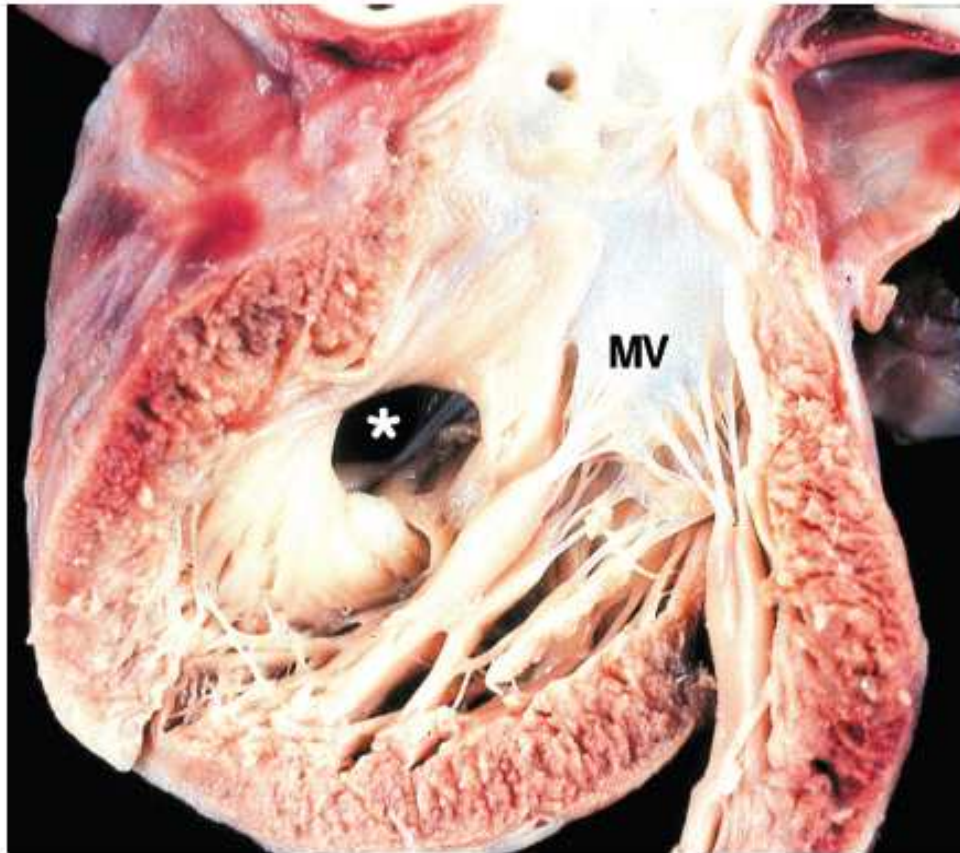
Treatment of Congenital Heart Disease

Why is it so special?



Treatment of Congenital Heart Disease

Why is it so special?



Treatment of Congenital Heart Disease(CHD)

Why is it so special?

- Highly trained medical, surgical, nursing personnel
- Team approach (many subspecialties)
- Intense labor
- Expensive equipments in a tertiary care facility
- Adequate basic infrastructure of the society
- Political stability of the local government (motivated)

- Children become **INOPERABLE** early in life & are dying even with “simple” cardiac malformations.
- Most CHD patients can lead a **NORMAL life** after proper treatment.

Mission, Vision , Goal in Asia

1. Humanitarian mission 

2. Education, training 

3. Research collaboration

Humanitarian Mission

Korea

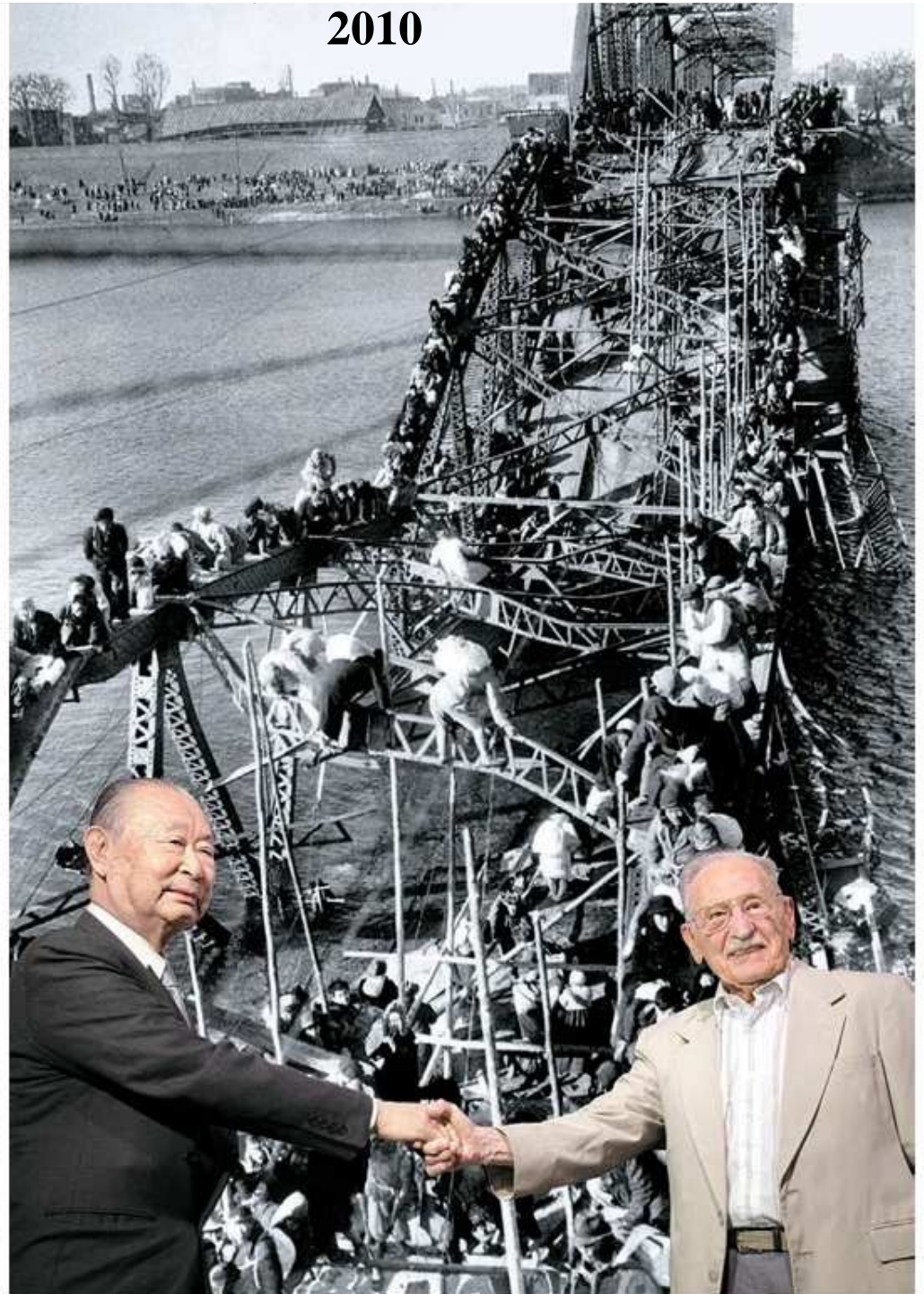
Past story 

How we are helping other Asian countries

1951



2010



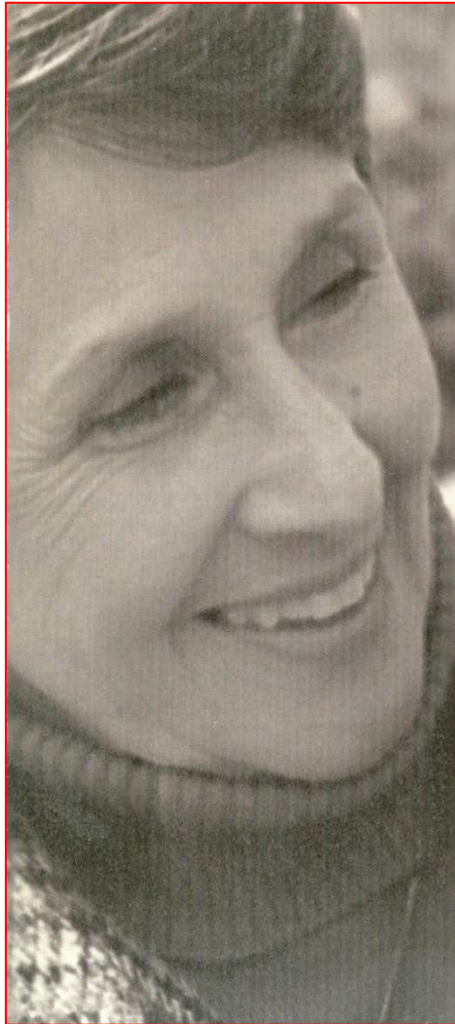


**Minnesota project : 1950-1960'
226 Korean MD's trained at
Univ. of Minnesota after the**



(South) Korean Story

Early & mid 1970th in Korea



U.S. Heart Surgery Saves 500 ROK Youths

Harriet H. Hodges, 65, received cards, letters and small presents from hundreds of Korean children and adults who know her simply as "grandma."

But Hodges, from New York, isn't even a distant relative to any of them. She earned their affection by giving the Koreans all from poor families, new lives by arranging free open-heart surgery in the United States for them.

Her life-saving started 10 years ago. Shortly after visiting Korea in 1972, she heard about a 12-year-old Korean girl suffering from a serious congenital heart disorder.

Immediately, she and her husband, then director of the American-Korean Foundation (now the International Human Assistance Programs) began a series of telephone calls and letters to hospitals and charity organizations in the United States seeking assistance.

She convinced the Metropolitan Medical Center in Minneapolis to accept the Korean girl. She also arranged a visa, an airline ticket and care for her during her four- to five-month stay in the United States.

It saved the girl's life. Once, she needed support to walk and a daily escort to and from school. She had to

avoid excursions and physical exercise. Her fingers and lips were swollen and blue.

It marked the start of the 10-year-old open-heart surgery program of the

IHAP, a non-governmental organization affiliated in the United States.

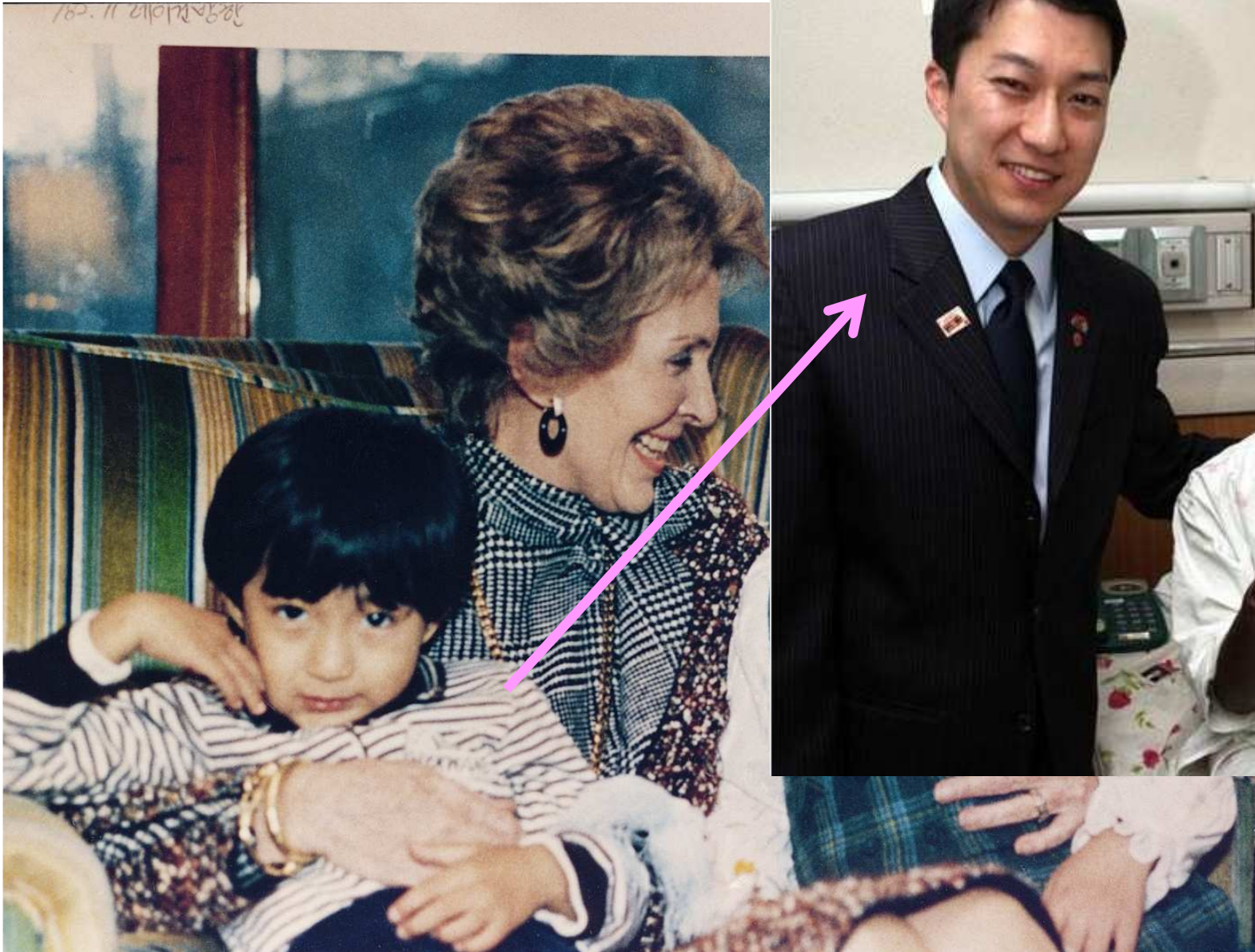
The program has saved more than 500 Korean children from congenital heart defects, which in most cases are fatal,



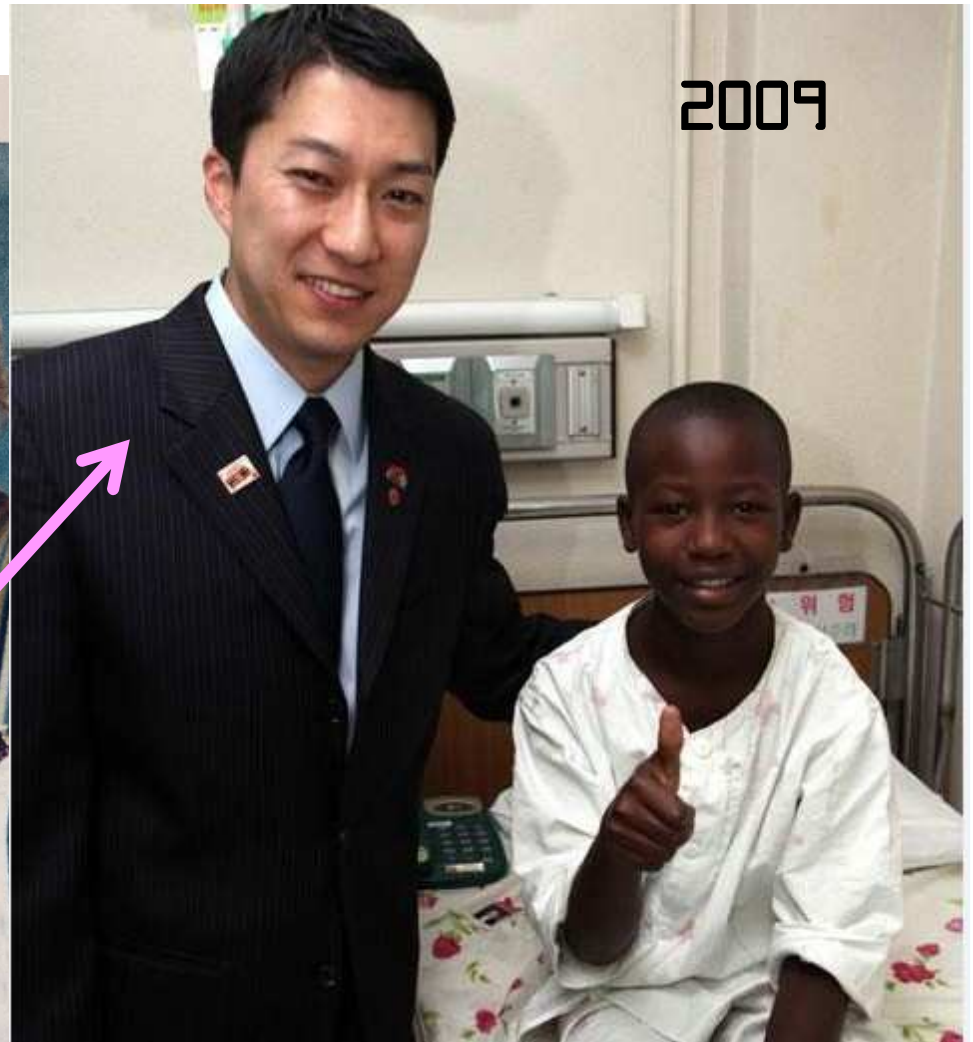
Two cardiologists from St. Francis Hospital check a Korean child with congenital heart disorder in Seoul.

Mrs. Hodges save over 3,300 Korean children with CHD in 1970'

Nov. 1983



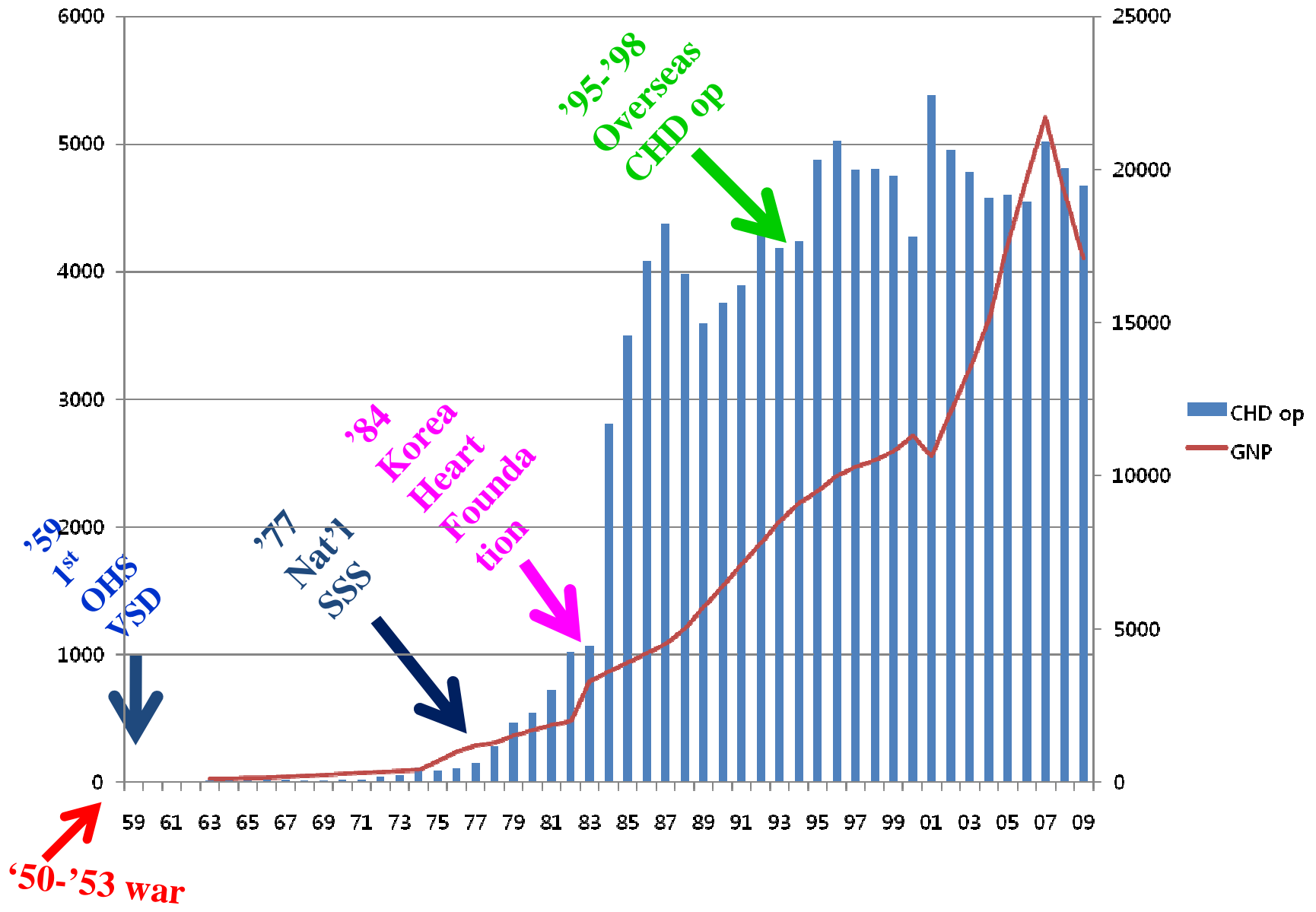
2009



→ 1984 Korea Heart Foundation

Number of Surgery for CHD (including Cath Tx)

GNP





1,300 gram
Neonate with
Transposition of
the Great
Arteries after
Total Correction

Children after Fontan Operation for Single Ventri



Oversees Project of Korea

Step 1. Bring pt to Korea for surgery → *expensive*

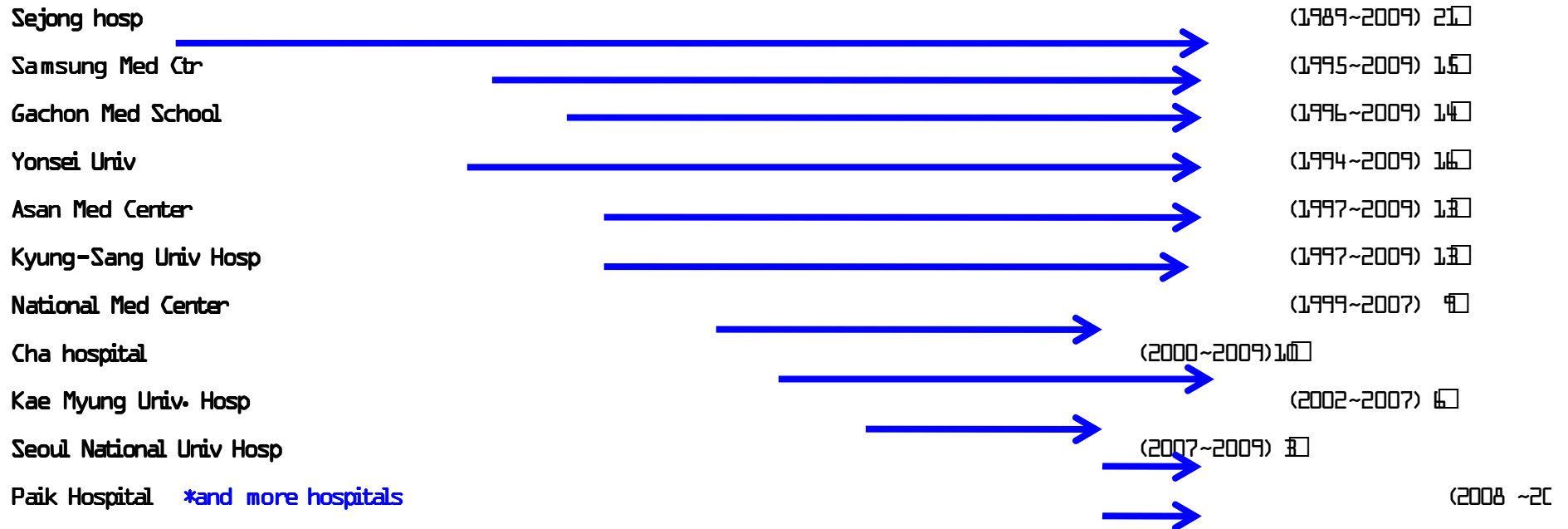
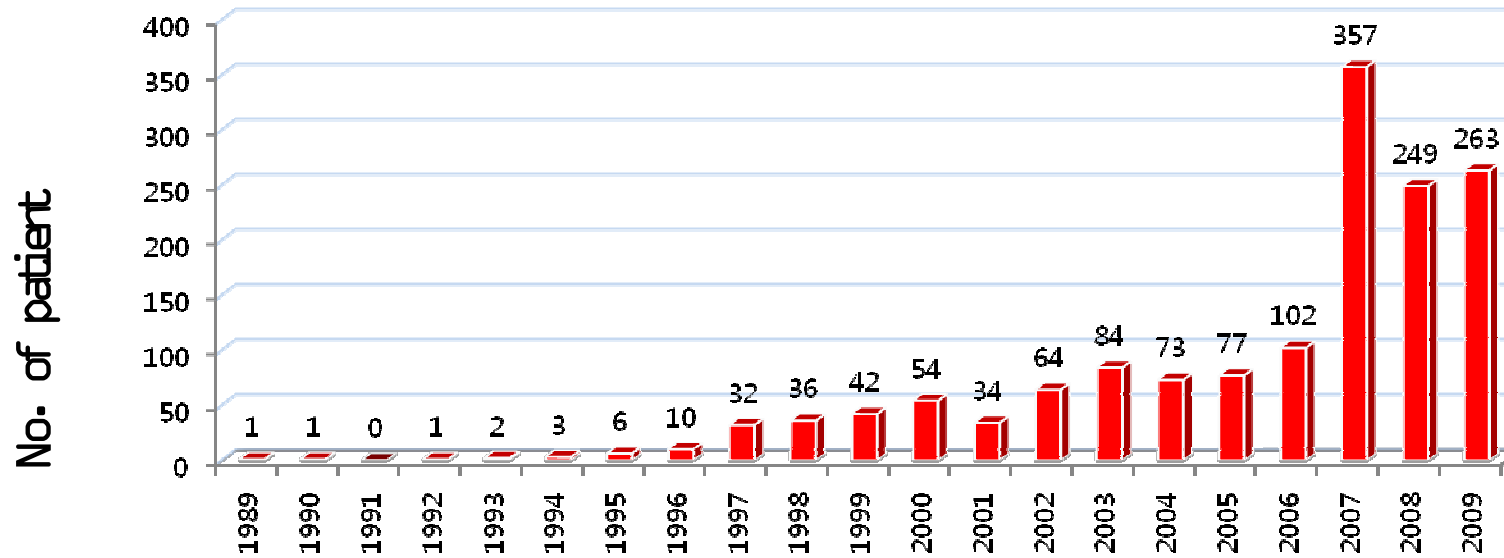
Step 2. Perform surgery at local hospitals

Step 3. Bring trainees

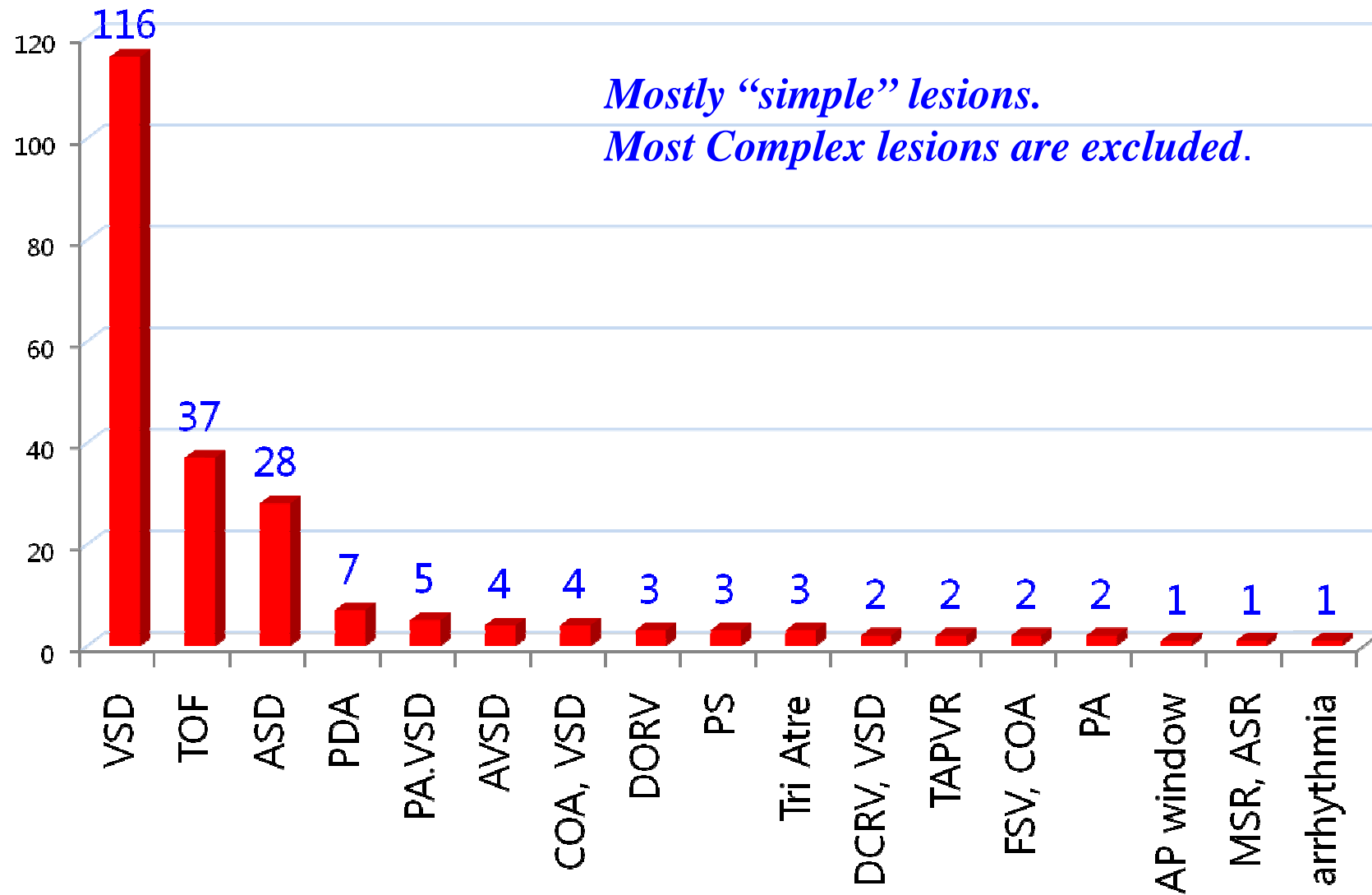
(as a “team” whenever possible)

Step 4 (**FINAL GOAL**). Help to set up CHD surgery center at local hospital by a local team

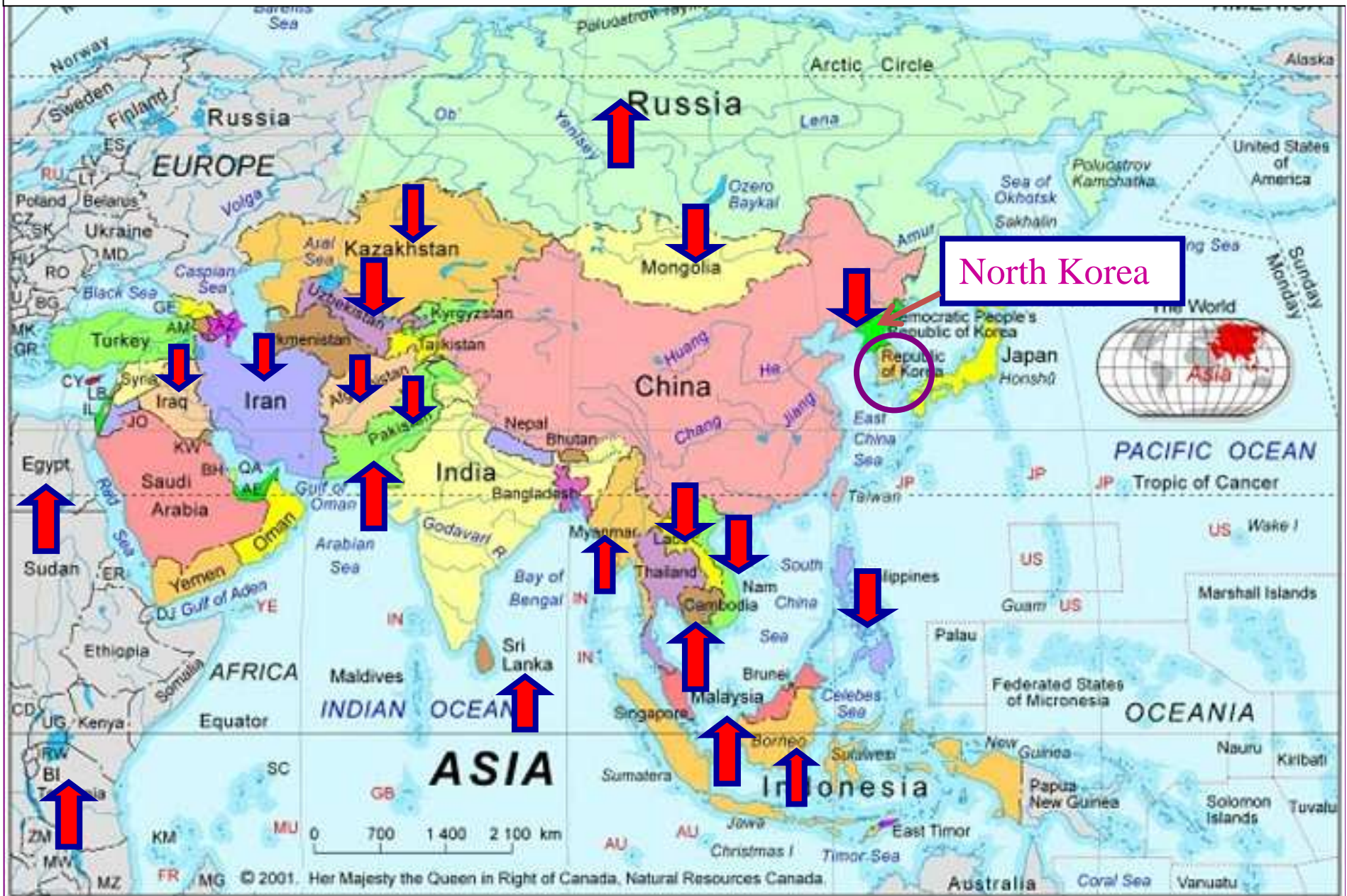
Number of Surgery for CHD on Foreign Patients (total >1,491) - in and outside of Korea -



CHD Dx : known in 221
pt (16.4%)



Countries where Korea is involved in caring CHD pt



'Asan In Asia (AIA)' Project

- Asan Medical Center→brought 300 trainees from Asian countries
- Concentrate Cambodia & Vietnam
- **Similar programs in other hospitals in Korea**



Asan Medical Center team in Cambodia 2005-2010



Cambodian patients at Asan Medical Center



**Children from Phillipines
at Asan Medical Center**



Heart-to-Heart Program (Vietnam)

(Samsung Medical Center – Hanoi Children’s Hospital)

1st CHD op in Hanoi 2003



**250 CHD surgery/year
by a local team**

Hà Nội children’s hospital now offers vital open heart surgery

HÀ NỘI — More northern children with heart trouble are expected to get necessary care now that Hà Nội’s National Paediatric Hospital has performed its first open-heart surgery.

The first patients receiving the surgery yesterday were five-year-old Nguyễn Thị Thảo and Nguyễn Thị Hương Lan, 6, both of whom suffer from congenital heart diseases. Both were reported in good health following the procedure.

Thảo and Lan are two of six patients currently scheduled to receive operations at the hospital, all at no charge. The first four surgeries are being performed by **Korean doctors**, with the remainder to be conducted by resident doctors at the hospital, with the technical support of the Koreans.

The hospital becomes the fourth medical facility in Việt Nam capable of performing open-heart surgery. Hospital director Nguyễn Thanh Liêm said it would now regularly carry out the surgery on children with heart diseases, mostly in northern provinces.

The hospital will waive about 60 per cent of operation fee for these patients, Liêm said.

It costs from VNĐ20 million to 30 million to conduct an open-heart surgery on one child.

It’s estimated that about 1 per cent of Vietnamese

OWNERS OF THE FUTURE



Doctors at the National Paediatric Hospital carry out open-heart surgery. — VNS Photo Thu Hoài

kind of surgery. in modern equipment over are Hà Nội’s Việt Đức
Liêm said his hospital the past two years. Hospital, Huế Central

Yonsei Univ team in Tashkent Pediatric Medical Institute. Uzbekistan (with Save the Children Korea) 2002-2007



**Yonsei Univ. team (with Save the Children Korea)
with Dr. & nurse from Mongolia since 2005**



Seoul National Univ Hospital team :
>300 CHD op in Harbin, China



“Seoul Project”

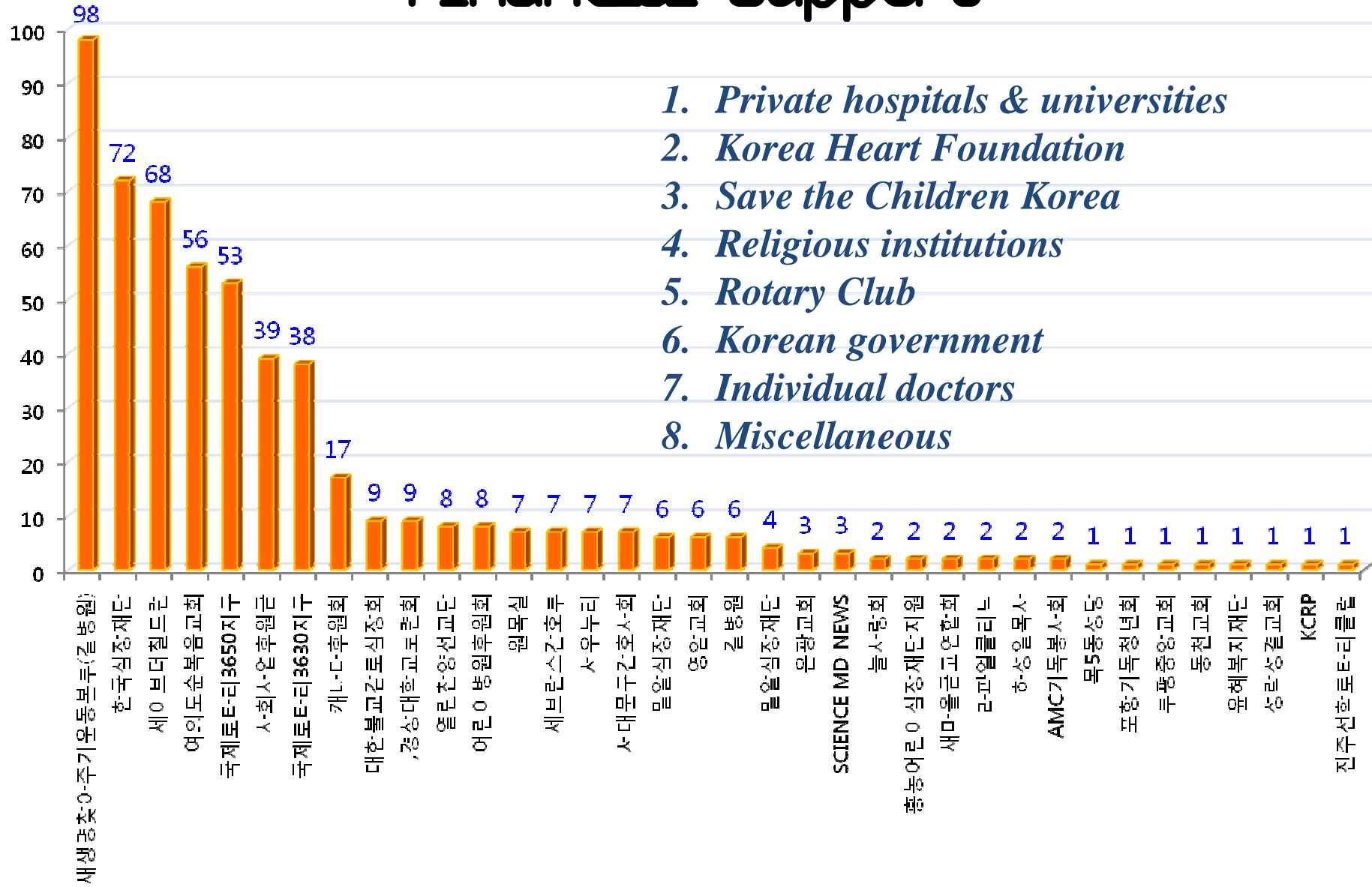
→ Contract btw Seoul National Univ Hospital and Laos Medical School for 9 years from 2010

Pusan National Univ. Hospital & Save the Children Korea in Laos (Heart Institute) in 2007



Number of pt

Financial support



1. Private hospitals & universities
2. Korea Heart Foundation
3. Save the Children Korea
4. Religious institutions
5. Rotary Club
6. Korean government
7. Individual doctors
8. Miscellaneous



North Asia

Central
Asia

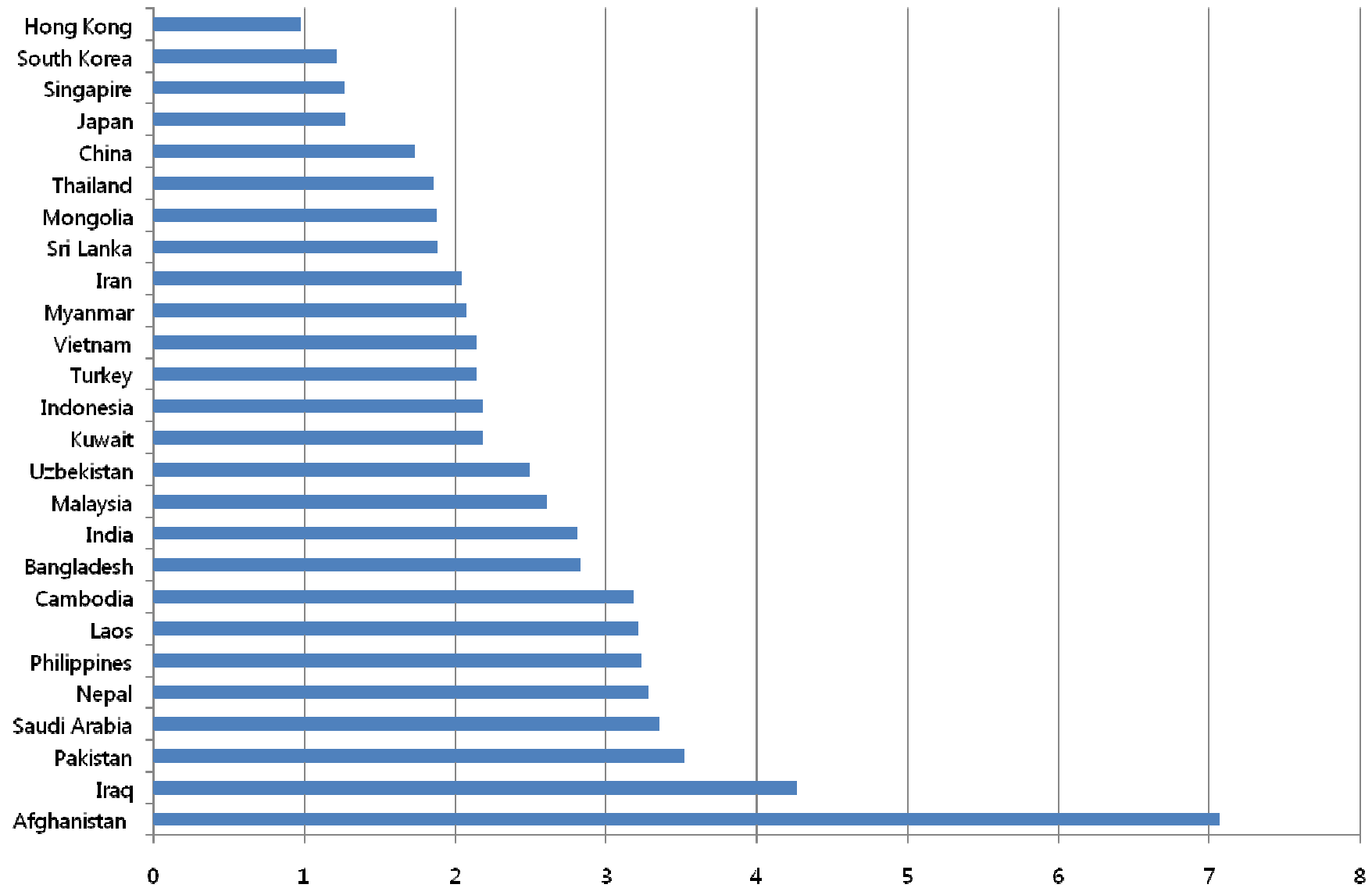
East Asia

South
West Asia

Southern
Asia

South East
Asia

Total Fertility Rate for Each Asian Countries



ASIA

	China	India	Other Asian countries	Asia (total)
Population	1.4 billion	1.1 billion	1.5 billion	4 billion <i>* world population 6.8 billion</i>
Live birth	16 million	28 million		100 million/yr
NB with CHD	150,000/yr	160,000/yr		250, ~ 500, 000/yr
CHD pt waiting for Tx	~ 4 million	~ 2-3 million ?	~ 4 million ?	~ 10 million?

- *Not including rheumatic heart disease !*

Problems in Asia (1) Main issues

“Developed region”

- Surgery for low birth weight neonates
- Hybrid approach for “complex” CHD
- New devices, new drugs
- Quality of life after Fontan op.
- Heart transplantation

*(*Rheumatic fever–vanished)*

“Underdeveloped region”

- Too many untreated “simple” CHD patients (many adults) are awaiting treatment.
- Many new CHD pt are born at this moment.
- Many of them are becoming inoperable.
- Too many rheumatic pt are becoming sick adult.

Problems in Asia (2)

- **Limited resource (personnel, finance, facilities)**
- **Priority in allocation of resource among**
 - **Other health related issues**
(water, sanitation, malnutrition, war-victims)
 - **Other disease (AIDS, malaria, other infection)**
 - **Types of CHD (“simple” vs “complex”)**
- **Inadequate basic infrastructure of the society**
- **Political instability**
- **New drugs(for PH), new devices– too expensive**

Now is the time to act!

(1) “Central office”



- **To avoid overlapping**
- **To maximize efficacy of aids**
- **For sustainable aids**

(2) Provide Education & Training

Funding for humanitarian mission & education/training

- **NGO**

 - Charity organization

 - Religious organization

 - Hospitals/Universities

 - Corporate donation

 - Individual donation

- **Government**

- **Global International organization**

PRIORITY !

SUMMARY

1. **Humanitarian mission**—*“running out of time”*
2. **Education, training**
3. **Research collaboration**

1. **Millions of patients waiting for Tx.**
2. **Too many Eisenmenger pt due to “simple” CHD**
3. **Too many rheumatic heart disease**

CONCLUSION — *What to do now?*

- 1. Control tower?**
- 2. Multidisciplinary team approach**
- 3. Collaboration/Cooperation :**
Sharing resource and information
- 4. Sustainable effort**
- 5. Basic infrastructure of the society**
- 6. Other health related issues**

Thank you

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