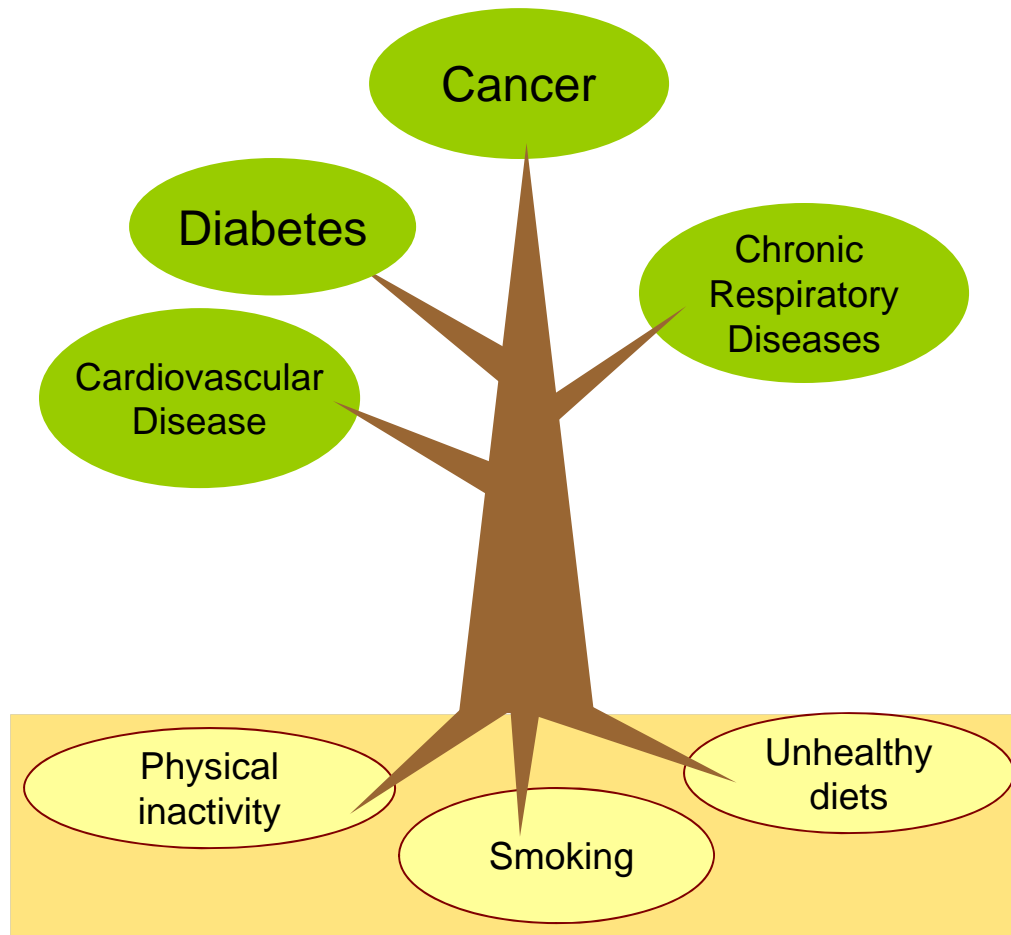




# HEALTH SYSTEM CHALLENGE AGAINST NCD THREATS IN ASIA- PACIFIC REGION

Masamine Jimba  
The University of Tokyo, Japan  
June 2009 at Johns Hopkins

# 4 MAJOR NCDs WITH SHARED PREVENTABLE RISK FACTORS



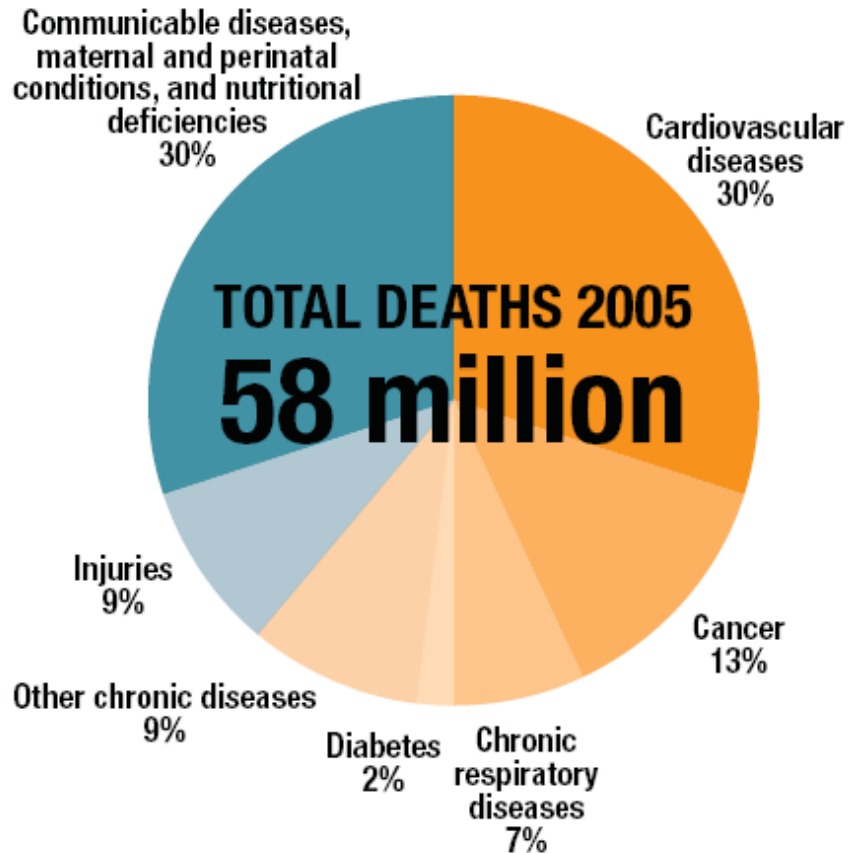
EVERY YEAR,

**35 million**  
people die from  
**Non Communicable**  
**Diseases**  
(41 million by 2015)

Source: 2008-2013 Action Plan for the Global  
Strategy for the Prevention and Control of  
Non communicable Diseases, WHO 2008



# NCDs' IMPACT



60% of all deaths are due to NCDs

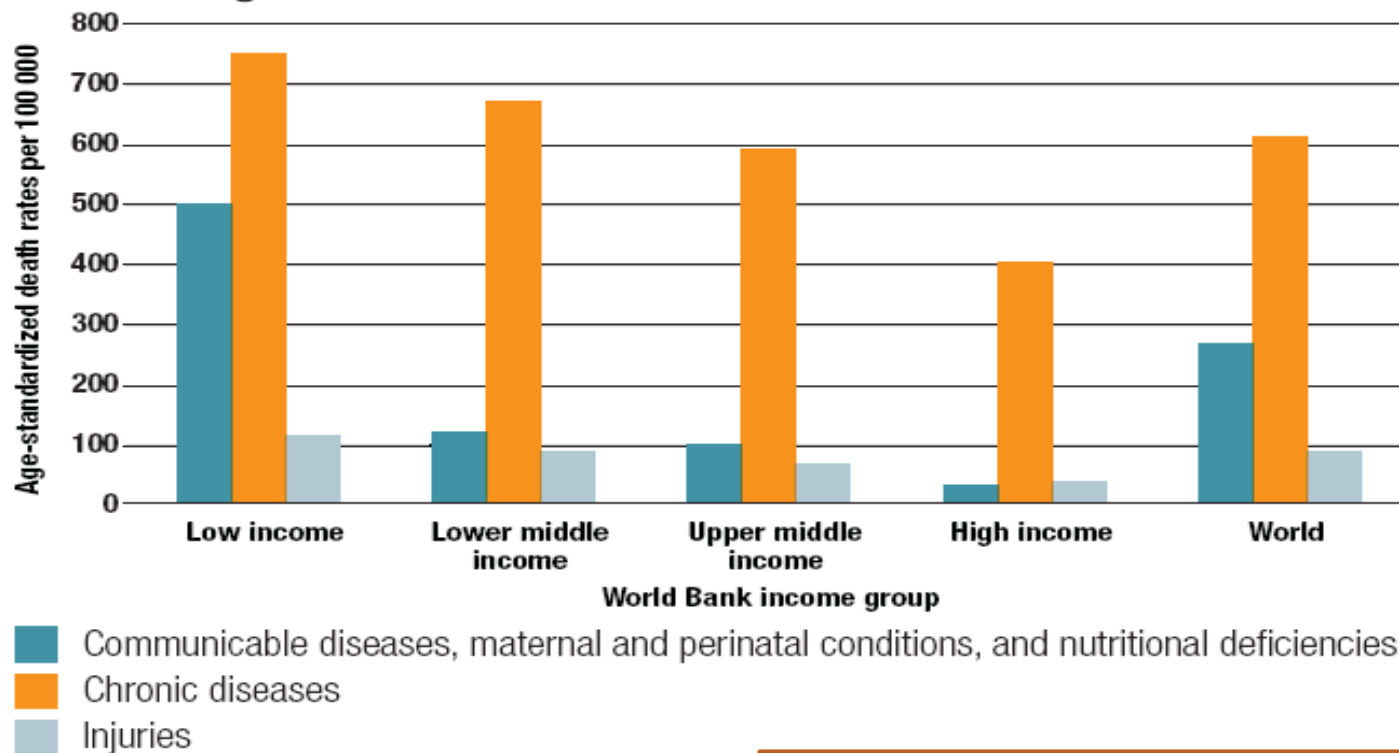


80% of them: in low- and middle-income countries

Source: Preventing CHRONIC DISEASES a vital investment, WHO 2005

# DEVELOPING COUNTRIES FACE THE DOUBLE BURDEN OF DISEASE

## Projected main causes of death by World Bank income group, all ages, 2005



Source: Preventing CHRONIC DISEASES a vital investment, WHO 2005

# WHY ACTION IS NEEDED TO ADDRESS NCDS IN DEVELOPING COUNTRIES

1. 60% of global deaths are due to NCDs and still increasing

2. Majority of the burden is in low- and middle-income countries

3. Up to 80% of cardiovascular disease, stroke and diabetes is preventable

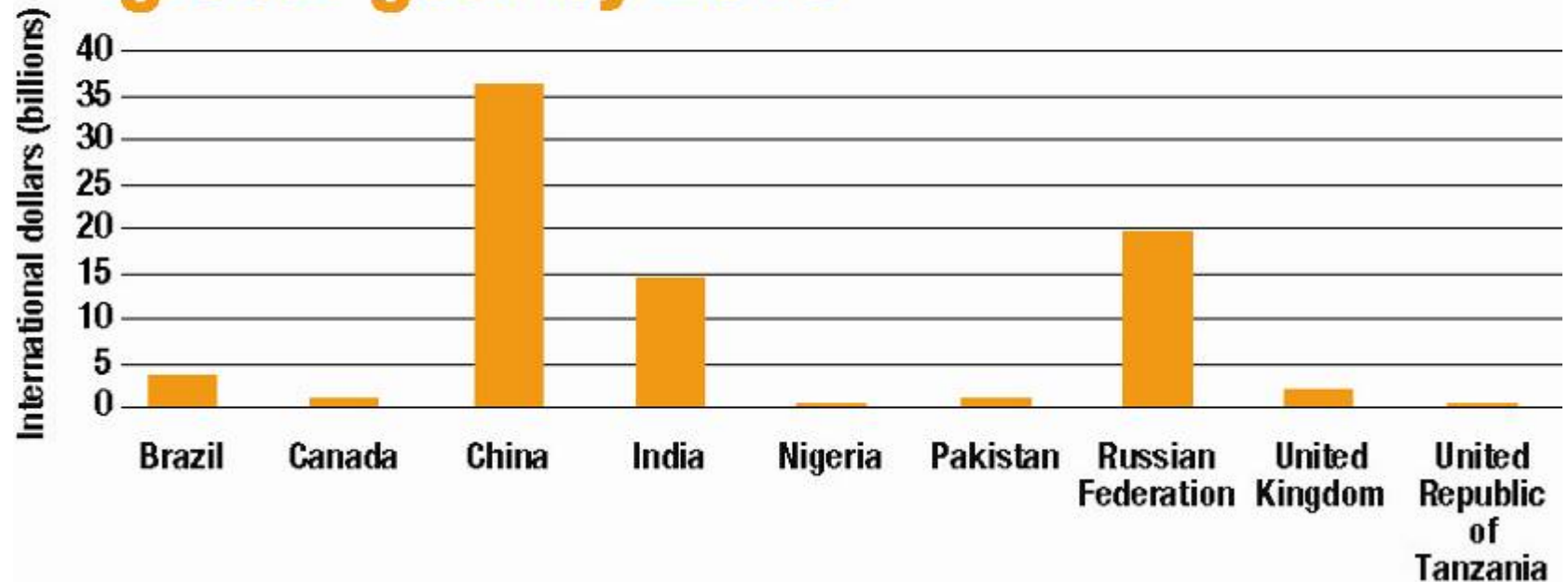
4. 40% of cancer is preventable

5. Cost-effective interventions exist and have worked in many countries



# WHY ACTION IS NEEDED AGAINST NCD THREATS? ---ECONOMIC GAINS IF SAVED: BILLIONS

## Labour supply gains from achieving global goal by 2015



# THE GLOBAL GOAL

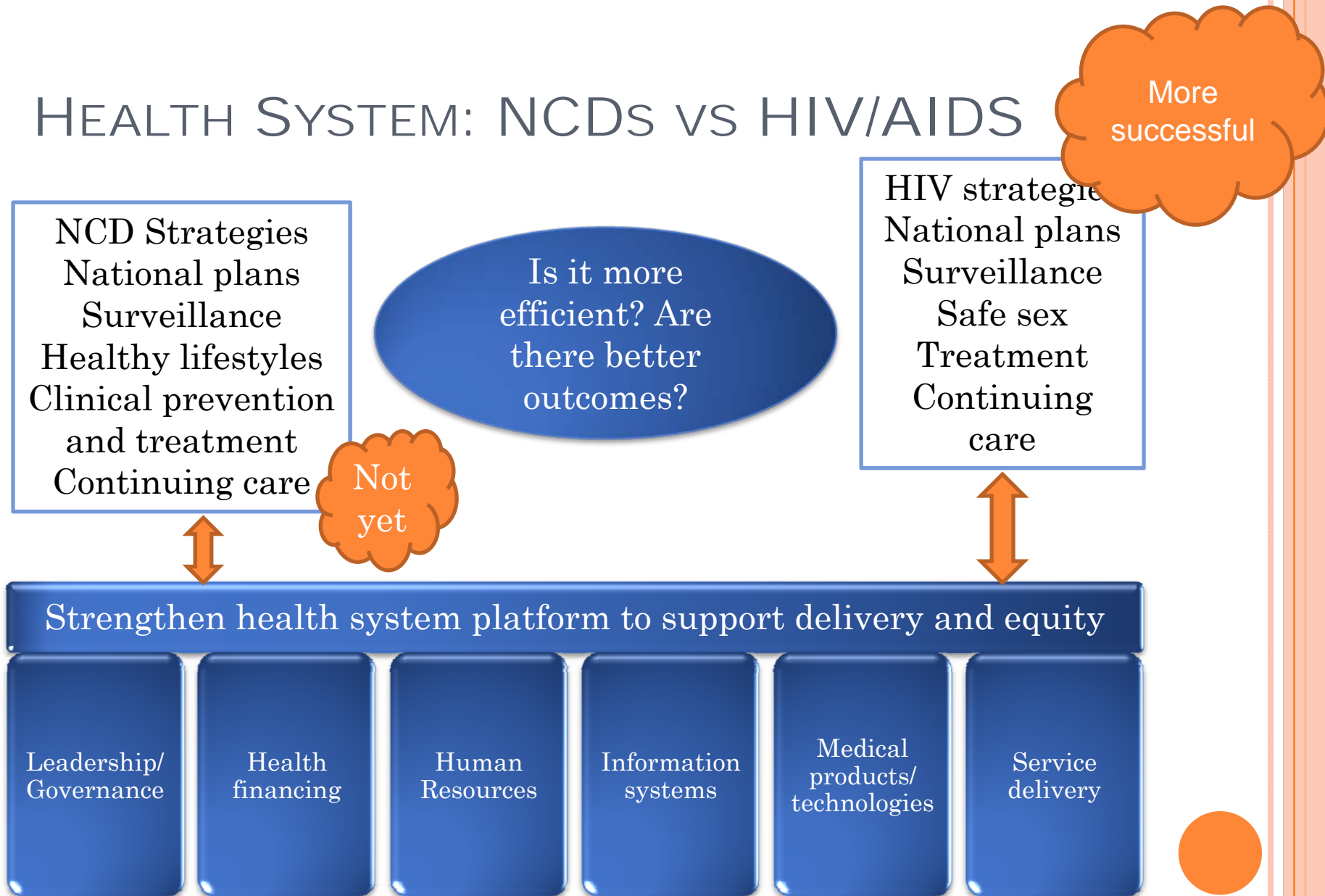
- A 2% annual reduction in chronic disease death rates worldwide, per year, over the next 10 years.
- The scientific knowledge to achieve this goal already exists.

However, health system to use this knowledge into practice is weak in many developing countries.

-Budget allocation, health workforce, service delivery, etc.

**36 000 000 lives can be saved**

# HEALTH SYSTEM: NCDs vs HIV/AIDS



Source: WPRO/NCD

# HEALTH WORKFORCE CRISIS

4 million  
health workers  
needed

2.4 million:  
physicians,  
nurses and  
midwives

Other:  
paraprofessionals  
etc.

57 countries  
under crisis

36 in sub-  
Saharan Africa

2006 World Health  
Report, WHO

# GOAL STATEMENT

***“ Every person, in every village, everywhere, should have access to a skilled, motivated and supported health worker.”***

**J W Lee, Late WHO Director-General  
(2006 World Health Report, WHO)**



# HWF CRISIS: MDG GOALS VS NCDs

## Health Workforce Crisis

- MDGs 4 (Child) and 6 (Infectious diseases)
  - Money worked for short-term training
- MDGs (Mothers)
  - Money plus need for more professional training

## NCD threats in developing countries: HWF crisis is not highlighted

- Strengthen health workforce is also critical for NCD control



# CHALLENGES FOR NCDs AND HEALTH SYSTEMS

## Worldwide

- International donors mainly focus on CDs
- In 2002, US\$2.9 billion ODA to health. Only 0.1% allocated to NCDs

## Lao PDR

- No treatment guidelines for NCD
- Small number of well-trained doctors for NCD control
- 700 med students for 100 seats (low quality teaching)

## Cambodia

- Less political power in NCD department
- Strong power in malaria, TB, HIV/AIDS

## Africa

- Less than 10% of public health budget for preventing and treating NCDs



# OPPORTUNITIES FOR OVERCOMING THE CHALLENGES FOR NCDS

## Global Initiatives

```
graph TD; A[Global Initiatives] --- B[Clinton Foundation: Childhood obesity]; A --- C[Bill and Melinda Gates Foundation: Reduce tobacco use]; A --- D[Global Alliance for Chronic Disease (2009)];
```

Clinton Foundation:  
Childhood obesity


Bill and Melinda Gates  
Foundation: Reduce tobacco  
use

Global Alliance for Chronic  
Disease  
(2009)



# APPLYING EXISTING STRATEGIES: POTENTIAL APPROACHES

Demands of NCD control are similar to those imposed by some CDs



Comparable strategies may be effective for NCD management



Existing strategies:  
Task shifting

# TASK SHIFTING: EXAMPLE FOR HIGH BLOOD PRESSURE CONTROL PROGRAM IN DIABETIC PATIENTS

## Background

- Control of blood pressure (BP) in patients with diabetes is often suboptimal. A model is needed to improve BP control, particularly in the context of health workforce shortage.

## Objective

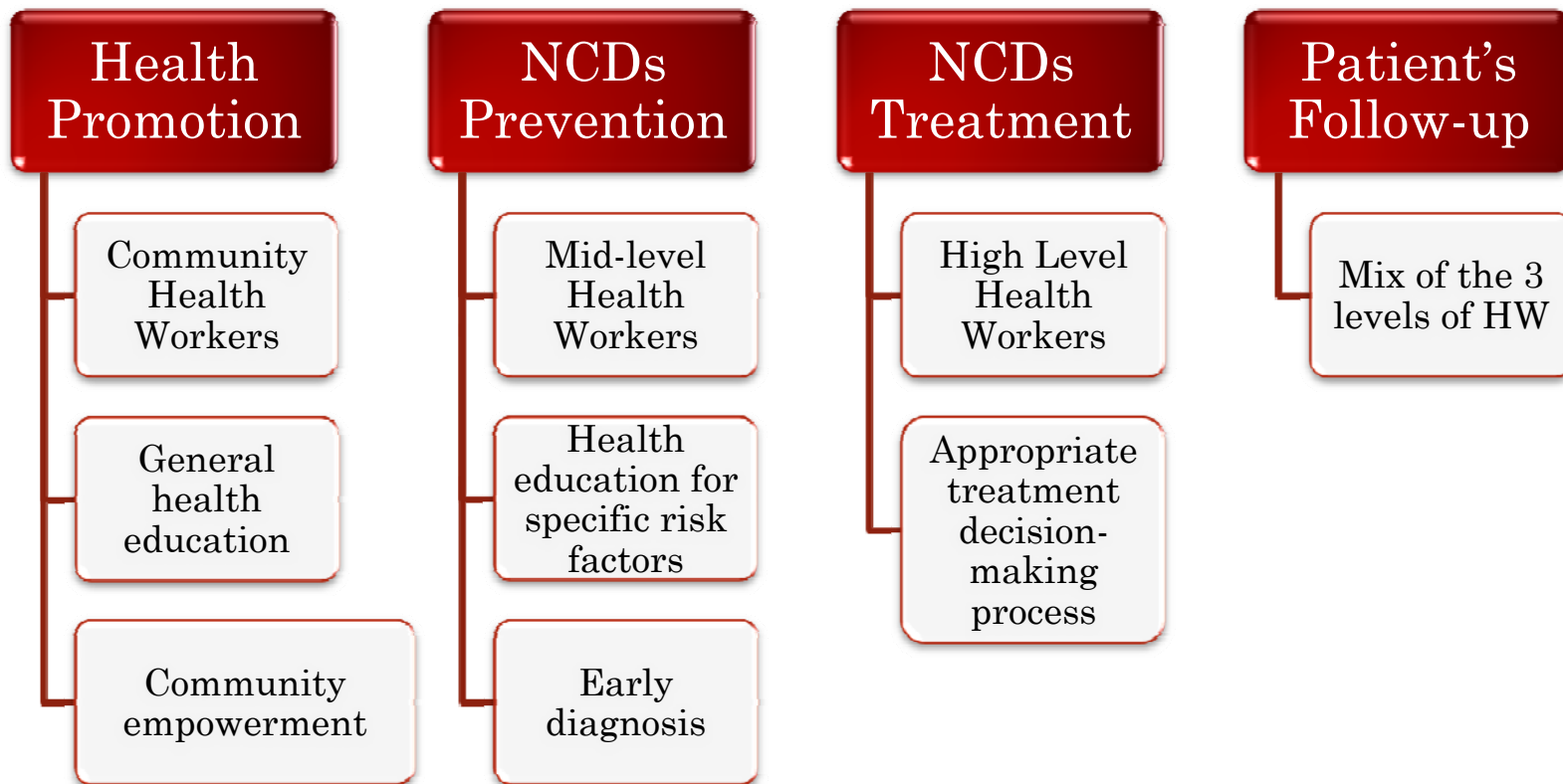
- To evaluate the efficacy of a program of community pharmacists and nurses to identify and treat patients with diabetes and suboptimal BP control.

## Result

- Community pharmacist and nurse team, can have a major effect on hypertension management in patients with diabetes mellitus and suboptimal BP control in the community.

DL McLean et al. A randomized trial of the effect of community pharmacist and nurse care on improving blood pressure management in patients with diabetes mellitus: Study of Cardiovascular Risk Intervention by Pharmacists-Hypertension (SCRIP-HTN). *Arch Intern Med* 2008; 168(21): 2355-2361. (Canada)

# HEALTH SYSTEM STRENGTHENING FOR NCDs (FOCUSING ON HEALTH WORKFORCE )



# RESEARCH PROPOSAL

## Target

- Low-income countries
- Middle-income countries

## Macro Study

- Examine health workforce policy for NCDs

## Micro Study

- Examine challenges and opportunities of health system strengthening efforts for NCDs



# MICRO STUDIES

1. Epidemiological studies of NCDs (DM,etc)

2. Analyze existing government health systems to cope with NCDs for prevention and treatment

3. Study health care seeking behaviour of NCD patients

4. Study training needs of health professionals for NCDs



# MICRO STUDIES (BASED ON NATURE, 2007)

5. Study how to integrate health system management of CDs and NCDs

6. Study how to develop culturally specific and nationally appropriate resources for training health care workers

7. Study how to provide more structured knowledge for health promotion



# WHAT TO DO WITH THE 'POLYPILL'?

(ONE PILL: STATIN, BP DRUGS, ASPIRIN, WHICH MIGHT PREVENT 3 QUARTERS OF HEART ATTACKS AND STROKES OF THOSE WHO ARE OVER 55 ) (RICHARD SMITH BMJ BLOG, 1 MAY '09)

## Drug companies

- A few dollars a month
- It can destroy highly lucrative markets

## Public health officers

- Alternative to a healthy lifestyle?

## Doctors

- Traditional model of 'diagnose and treat' may not work

