A magnifying glass with a wooden handle is positioned over a green map of the Asia Pacific region. The text 'SEARCHING RESEARCH IN THE ASIA PACIFIC' is written in large, bold, black, serif capital letters across the map. The magnifying glass is focused on the word 'RESEARCH'.

Taal Vista Hotel
Tagaytay City, Philippines
7-8 April 2006

A Research Priority Setting Workshop
for the
Asia Pacific Society of Cardiology

In partnership with
 Schering-Plough
Corporation

ACKNOWLEDGEMENTS

Mr. Jay Sepulveda, Schering-Plough Corporation

APSC Task Force on Research

Organizing Committee, Philippine Heart Association

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“What we will plan, we will do.”

Datuk N. Arumugam, Tagaytay, April 2006

EXECUTIVE SUMMARY

Eight member countries of the Asia Pacific Society of Cardiology (APSC) held its 1st Task Force activity on research priority setting at Tagaytay City, Philippines last April 7, 2006. Bangladesh, Indonesia, Malaysia, Nepal, Singapore, Taiwan, Japan and the Philippines each reported briefly on the current health situation (morbidity, mortality, prevalence and burden of cardiovascular diseases) and cardiovascular disease research priorities in their country.

Priorities on cardiovascular diseases (CVD) for the Asia Pacific Region were the workshop's principal output. Research topics on CVD were identified, assessed and ranked based on relevance, avoidance of duplication, feasibility, urgency, applicability, and political as well as ethical acceptance. By order of rank, these are: 1) Tobacco control strategies; 2) Epidemiology of cardiovascular diseases; 3) Risk factors for cardiovascular diseases; 4) Disease Registries; 5) Guidelines/policies; 6) Clinical trials; 7) Advocacy/social marketing; 8) Knowledge translation; and 9) Genomics. Each member country is expected to discuss and select a research topic locally, and present their individual results at the PHA-APSC joint symposium in May 2006.

Other concerns to be addressed by APSC in the future include strategies on improving organizational structures, infrastructure and websites; as well as identifying funding sources, capacity building and collaboration activities.

WORKSHOP OBJECTIVES

- Provide overview of the research priority process
- Presentation of country reports
- Identification of research priorities in the region
- Explore potential partnerships

Highlights of the APSC Research Meeting Mumbai, India (Dec 2005)

Eugene Reyes, MD



Key Points:

- Australia, Indonesia, Japan, Nepal, Pakistan, Philippines, Singapore and Thailand were among the member countries that attended the APSC meeting in Mumbai in December 2005.
- APSC's obligation as a healthcare organization is to conduct research and develop programs that promote improvement in healthcare.
- Its vision is to conduct basic and clinical research and effectively implement and apply results to improve health.
- Iterative loop of the epidemiologic cycle
 - Identify the burden of illness (research may kick off from this stage)
 - Identify possible etiology or causation
 - Assess the effectiveness of available treatment/s
 - Synthesize results by guidelines provided
 - Monitor the implications
 - Reassess the significance and effectiveness of treatments
- The APSC Task Force on Research was formed to explore collaboration and facilitate coordination thus the 1st APSC Research Priority Workshop was organized.
- Problems to be addressed:
 - There is a high number of research output but low utilization of these outputs because of "low quality" researches
 - Minimal or no funds to do research
 - Lack of technical assistance and training centers in most regions
 - Political and economic situations

**Let Us Improve Healthcare
through Research!**

As a member of a healthcare
organization we have an
obligation to conduct research
that is of importance to patient
care and society

**Mumbai, India
December 2005**

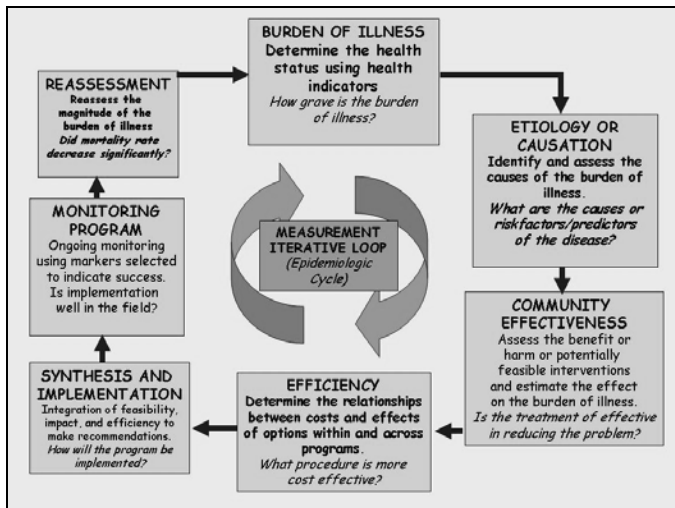


3

Core Value (Reyes 2005)

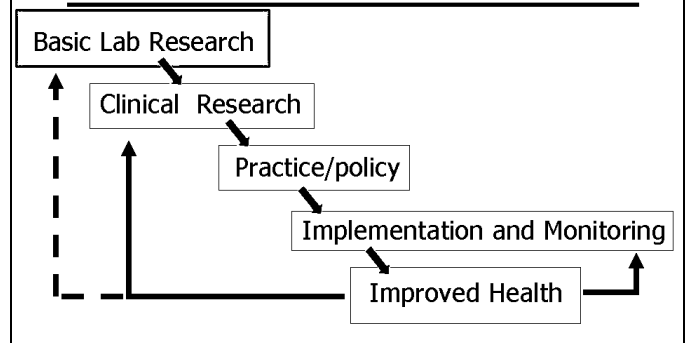
To conduct basic and clinical researches and develop programs to improve patient care and to benefit society

6



4

Research Impact Cycle



7

APSC TASK FORCE ON RESEARCH

- Explore Collaboration
- Facilitate Coordination

5

Achieving Our Vision

Basic → Clinical → Implementation → Improved Health

*Translating Biomedical Research to the Bedside:
A National Crisis
JAMA, March 2003*

8

Problems

1. Increased research outputs
 - less utilization
2. No unified priority setting
3. Funding
 - resort to low cost studies
4. Lack of technical assistance
5. Limited training centers
6. Political and economic situation

9

Thank you

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Process and Criteria for Research Priority Setting

Nina T. Castillo-Carandang, MA, MSc



“Research results must be translated to everyday practice.”

Key Points:

- Health research is of global importance. It must not only focus on the disease but also examine the social, environmental and economic contexts that determine the occurrence and persistence of diseases. Economic growth may be a determinant to improved health and vice versa.
- Approaches to identifying global health research priorities (Labonte and Spiegel):
 - Burden of disease (BOD)
 - Inherently Global Health Issues (IGHIs)
- IGHIs are subdivided into three categories:
 - Environmental global degradation
 - Social/economic trends
 - Cross-cutting issues
- According to Labonte’s and Spiegel’s briefing paper for the Canadian Institutes of Health Research (CIHR), research must focus on both burden of disease and Inherently Global Health Issues (IGHIs). Thus priority to research on IGHIs that will reduce the burden of disease should be given importance.
- Priorities are set to ensure that resources are properly allocated, human and financial resources are identified. They are set to reinforce the links between research action policy and practice.
- Benefits of priority setting:
 - Encourages systems thinking
 - Evaluate programs and interventions
 - Monitor results vs. the health system
- Criteria for funding, which are based on number of individuals affected, number of deaths, disability and economic costs, or based solely on immediate dangers if applied exclusively would under-fund rare diseases.
- Approaches to Priority Setting:
 - *Essential National Health Research (ENHR) Approach*
It focuses on the analysis of health needs, people’s expectations and demands and applied on a national level. Priorities are set based on relevance, feasibility and impact. It involves researchers, health providers and communities.
 - *Five-step Process or Ad-Hoc*
This approach is applied on a global scale. Burden of disease, knowledge base, resource allocation and cost-effectiveness of interventions are the criteria used by experts to set priorities
 - *Combined Approach*
It incorporates criteria and principles both from the ENHR and Ad Hoc

- Steps in Setting Priorities:
 - Identify a leader and set a work plan
 - Assess the needed information
 - Identify and involve stakeholders
 - Select and use criteria
 - Product of the priority setting
- After setting priorities, the next step is to develop a proposal

**Health Research & Development:
A Global Imperative**

(Source: Priority Setting for Health Research, Adnan A. Hyder, MD MPH PhD)

- 1. Population** - the most valuable asset of a country.
- 2. Value of the Asset** is measured by its Health Status.
- 3. Health Status** depends on many determinants.
- 4. With unlimited resources**, we could act on all determinants.
- 5. Resources being limited**, we have to select the determinants which have the greatest impact on health.
- 6. Only through research** can a country identify the key determinants for the health of the country.
- 7. Conditions of success:** keep research out of isolation.

1

Table 1: Inherently Global Health Issues

Environmental global degradation	<ol style="list-style-type: none"> 1. Greenhouse gas emissions (climate change) 2. Biodiversity loss 3. Water shortage 4. Decline in fisheries 5. Deforestation
Social / economic	<ol style="list-style-type: none"> 6. Increasing poverty 7. Financial instability (capital markets) 8. Digital divide 9. Taxation (tax havens, transfer pricing)
Cross-cutting	<ol style="list-style-type: none"> 10. Food (In)security 11. Trade in health-damaging products 12. Governance 13. War and conflict

4

INHERENTLY GLOBAL HEALTH ISSUES (Labonte and Spiegel 2001)

- *Inherently Global Health Issues* (IGHIs) are health determining phenomena that transcend national borders and political jurisdictions.
- The analytical pathways triggered by these global “drivers” may be more difficult to trace or, in some cases, still somewhat speculative.

2

Why set health research priorities?

- Ensure that available resources are properly allocated
- Identify human and financial resources required
- Reinforce and strengthen the links between research, action, policy and practice

5

INHERENTLY GLOBAL HEALTH ISSUES (Labonte and Spiegel 2001)

- Their potential health effects, however, could overwhelm the best efforts of disease-based intervention.
- Global health research requires more attention on the assessment of IGHIs as a way to complement the more traditional focus on diseases or vulnerable groups.

3

Priority-Setting Benefits

- Encourages “systems thinking” within an institutional or national health research system.
- Disciplines the system and the actors (healthcare workers, patients, policymakers, etc.) in it to:
 - ✓ monitor the contribution of research to the health of populations and the performance of the health system;
 - ✓ evaluate programs and interventions;
 - ✓ be explicit about values and the criteria by which decisions are made;
 - ✓ be more accountable to stakeholders.

6

Setting Research Priorities at the National Institutes of Health

Assessing Health Needs and Scientific Opportunities

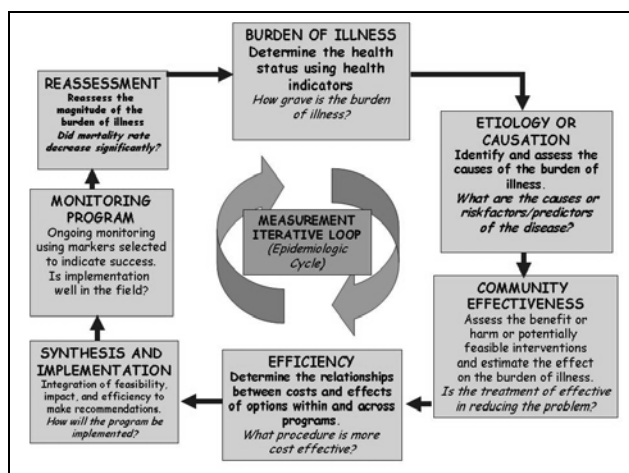
<http://www.nih.gov/about/researchpriorities.htm#opportunities>

7

If health needs alone were used to gauge priorities, research funds might be distributed based on:

1. The number of people who have a particular disease.
2. The number of deaths caused by a disease.
3. The degree of disability produced by a disease.
4. The degree to which a disease cuts short a normal, productive, comfortable life.
5. The economic and social costs of a disease.
6. The need to act rapidly to control the spread of a disease.

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8

Using any one of these criteria to make funding decisions would produce a different result:

1. Funding according to the number of individuals affected

- This would emphasize common diseases, but might have a limited effect on overall health and survival

Example:

Much research would be done on the common cold and allergies and little on childhood cancers.

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Assessing the health needs of the nation

- Difficult to simply prioritize research problems and allocate funds to research on one disease or another according to a single set formula.
- Many possible ways of measuring the health needs of the nation and distributing research funds, each with advantages and drawbacks.

9

If health needs alone were used to gauge priorities, research funds might be distributed based on:

2. Funding according to the number of deaths

- This would neglect chronic diseases that produce long-term disability and high costs to society, such as mental illness, arthritis, and heart diseases.

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If health needs alone were used to gauge priorities, research funds might be distributed based on:

3. Funding according to disability or economic cost raises questions about

- how well disability or economic costs can be quantified
- whether only the direct costs of medical care should be counted or
- whether indirect costs (e.g., lost productivity), which are difficult to measure, should also be included.

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- All of these criteria for weighing and weighting health needs are justifiable
- Yet applying any one of them exclusively would cause the neglect of some classes of diseases altogether.
- Moreover, any of these criteria used exclusively would, for example, under-fund research on rare diseases
 - Research that has taught us much about the diseases themselves and a great deal about normal human biology, other diseases, and new approaches to treatment.

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If health needs alone were used to gauge priorities, research funds might be distributed based on:

4. Funding according to the economic cost of illness

This would under-fund diseases that result in a short illness and rapid death.

This choice would provide a great deal of funding for Alzheimer's disease and muscular dystrophy and little, or none, for sudden infant death syndrome or certain types of cancer.

14

- Clearly, it is not easy to determine how to allocate funds according to the *impact* of various diseases.

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If health needs alone were used to gauge priorities, research funds might be distributed based on:

5. Funding based solely on immediate dangers to public health

May divert funds from areas of research of much broader long-term impact.

This choice would mean that a great deal of research would be done on AIDS and tuberculosis and little on Parkinson's disease and asthma).

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Assessing scientific opportunities

- Assessing scientific opportunities is no less complex than evaluating health needs.
- It requires
 - expertise in many scientific fields,
 - breadth of vision across many disciplines, and
 - judgment to determine the likely yield from making investments in particular areas of research.
- It is never certain which scientific areas will produce the greatest returns soonest.

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Assessing scientific opportunities

- At any given time, moreover, some fields appear to be
 - progressing more rapidly than others and
 - more likely to repay the investment in them by producing great discoveries that advance knowledge.
- Scientific opportunities may arise from many sources
 - from a single technological development, or
 - from a scientific "breakthrough."

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Heart Disease

- Progress in this area was slow at first, but then scientists began to associate lipids (such as cholesterol, carried in the blood) with the development of atherosclerosis in humans.
- In the early 1960s, research on the NIH Bethesda campus led to a way of classifying various types of lipid abnormalities in families.
- This work led to meaningful associations between variations in lipid metabolism and atherosclerotic heart disease.

22

Assessing scientific opportunities

- Often the breakthrough or even the knowledge accumulated is in an area that appears only remotely related to the area where it will have its greatest impact.
- Recognition of these scientific opportunities allows investigators to approach previously unanswered questions in new ways.

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Heart Disease

- In addition, through carefully planned, long-term epidemiologic studies (studies of the occurrence and distribution of disease in large groups of people), the understanding emerged that risk factors such as blood cholesterol levels and cigarette smoking, as well as high blood pressure (which was recognized much earlier as a predictor of premature death) can make people susceptible to disease.
- Identifying scientific opportunities in basic, clinical, and epidemiological research on lipid metabolism has resulted in phenomenal progress in understanding the underlying processes that lead to atherosclerosis, as well as its prevention and treatment.

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Heart Disease

- Work in blood lipid research and heart disease illustrates how health needs and scientific opportunities coincide.
- Nearly 55 years ago, the NIH identified research on coronary heart disease as an important health priority.
- This disease is caused by atherosclerosis, the build up of lipids (fatty substances) in the heart's main arteries, which can block blood flow and thereby cause the death of heart tissue — that is to say, a heart attack.

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Heart Disease

- For example, benefits from this research include the development of cholesterol-lowering drugs and prescriptions for changes in behavior (less dietary fat, no smoking, more exercise), with a dramatic decrease in age-adjusted mortality from heart disease as a consequence.
- Still, many challenges in coronary heart disease remain.
- Future targeted areas of research include an analysis of why cholesterol accumulates in artery walls and ways to facilitate its removal, and prevention of the accelerated form of atherosclerosis which causes between 30 and 40 percent of grafts to become narrowed again after bypass surgery.

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Approaches to Priority Setting

1. Essential National Health Research (ENHR) Approach



Developed by Council on Health Research for Development (COHRED)

Strategy for each developing country to set national priorities for research.

Requires the best currently available and locally specific information

Should address issues of equity.

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Approaches to Priority Setting

3. Combined Approach Matrix



Global Forum for Health Research (GFHR)

Aims to incorporate criteria and principles for priority-setting defined in:

- ENHR approach
- Five-step approach

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Approaches to Priority Setting

2. The Five-Step Process



Ad Hoc Committee on Health Research Relating to Future Intervention Options (1994-1996, WHO).

Suggests 5 steps to inform decision-making about the allocation of R&D resources to and within a problem area.

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The Global Forum Combined Approach Matrix to help priority-setting for health research

Five steps in priority setting	The individual, household and community	Health ministry and other health institutions	Sectors other than health	Macroeconomic policies
1. What is the burden of the disease/risk factor?				
2. Why does the disease persist? What are the determinants?				
3. What is the present level of knowledge?				
4. How cost effective could future interventions be?				
5. What is the resource flow for that disease/risk factor?				

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Five steps of priority setting

- **Magnitude**
What is the burden of the disease?
- **Determinants**
Why does the burden of disease persist?
- **Knowledge today**
What is known today about existing interventions
How cost-effective are they?
- **Cost-effectiveness of future interventions**
- **Investments**
What are the resource flows for that disease/risk factor?

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Comparative Analysis of Approaches

Issues	ENHR	Ad Hoc (5-Step)	Combined Matrix
Rationale	Systematically guide current & future country efforts in developing & implementing research agenda	Assist decision making by governments, industry and other investors on the allocation of funds, to and within, health R&D. Complement national assessments with a global one.	Incorporate criteria & principles for priority setting of previous approaches into a combined one. Use priority setting techniques to gain as many years of healthy life as possible for a given investment in health research

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Comparative Analysis of Approaches

Issues	ENHR	Ad Hoc (5-Step)	Combined Matrix
Level of application	National and subnational	Global	Global (disease, determinants/risk factors)
Information used	Quantitative & qualitative data in relation to: <ul style="list-style-type: none"> health status the health care system the health research system <p>Focus on:</p> <ul style="list-style-type: none"> analysis of health needs people's expectations societal trends (demand side) 	Burden of disease (DALY). Information about 20 risk factors & Determinants (e.g. alcohol use, blood pressure, unsafe water etc. Knowledge base about the health problem Cost-effectiveness of current & potential interventions Resource allocation to R & D on specific health problem	The same information as Five Step process, but applied at four levels of intervention: <ul style="list-style-type: none"> individual, family & community health ministry, health systems & services, health research community sectors other than health central govt. & macroeconomic policies

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Differences of 3 approaches

- Use different weights and information base
- Address explicitly the issue of underlying values
- Different levels of application (national, subnational or global)

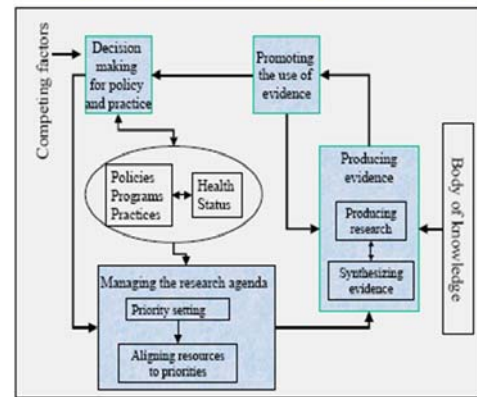
34

Comparative Analysis

Issues	ENHR	Ad Hoc (5-Step)	Combined Matrix
Criteria	Appropriateness: <ul style="list-style-type: none"> ethical and moral issues human rights issues legal aspects political acceptability adequacy and usefulness of the current knowledge base 	Relevance: <ul style="list-style-type: none"> magnitude and severity of the problem responsiveness to health policy equity focus 	Matrix model: <ul style="list-style-type: none"> epidemiologically significant burden of disease determinants of disease burden effect on equity ethical, political, social, cultural acceptability probability of finding a solution scientific quality feasibility contribution to capacity strengthening
Performance of the system:	Determinants: <ul style="list-style-type: none"> technical economic political social ethical affordability efficacy effectiveness equity & coverage 	Health Communities: <ul style="list-style-type: none"> leading causes of disease high likelihood of available potential 	Performance of the system: <ul style="list-style-type: none"> efficient equity quality

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Research to Policy Process



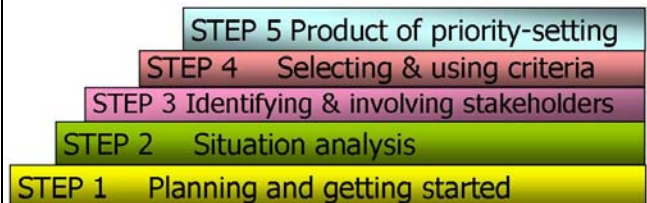
35

Commonalities of 3 approaches

- Each of the three approaches
 - Both a mixture of methods and tools as well as to the process of setting priorities
 - Rational
 - Collect all available information on what is needed and what is possible
 - Identify objectives and collect data on what value is placed on these objectives by various groups
 - Require an adaptation of their methodology to the context (level, area, type of problem) they are addressing.
 - Recognize the need for criteria as the means by which health research needs can be ranked.

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Steps in the Process of Setting Research Priorities



36

Steps in the process of setting research priorities

- **STEP 1 - Plan and get started**
 - Identify suitable leadership
 - Raise awareness with stakeholders
 - Agree on a workplan

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Steps in the process of setting research priorities

- **STEP 2 - Situation Analysis**
(Assemble the Needed Information)
 - Health status information
 - Health care system information
 - Health research system

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Preparatory Work by the Team Convening the Priority Setting Process

(Adapted from: COH-RED (Okello, P. Chongtrakul, P and the COH-RED Working Group on Priority Setting) 2000. A Manual for Research Priority Setting Using the ENHR Strategy. Geneva: Council on Health Research for Development. COH-RED Document No. 2000.3. Pg. 8.)

1. Is the country/state/district/institution ready for priority setting?
 - Is the process of setting priorities adequately understood?
 - Has the need for priority setting been explicitly stated?
 - If so, what is the evidence?
 - If not, why not?

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Steps in the process of setting research priorities

- **STEP 3 - Identify & involve stakeholders**
 - Who to involve
 - How to involve them
 - Delphi method (written)
 - Nominal group technique (silent)
 - Round table (in turns)

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4. Do the groups represented understand the key elements of priority setting?

Elements:

- Inclusiveness and partnership
 - Focus on equity in research
 - Transparency and consultative processes
5. Is there enough background information such as
 - health statistics?
 - socioeconomic profiles?
 - prior research information?
 6. Is there credible leadership?

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Steps in the process of setting research priorities

- **STEP 4 - Select & use criteria**
 - Which criteria are to be used?
 - Will criteria be assigned equal or different weights?

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Examples of Categories for Grouping Selected Criteria by Theme

(Source: COHRED (Okello, P., Chongtrakul, P. and the COHRED Working Group on Priority Setting) 2000. A Manual for Research Priority Setting Using the ENHR Strategy. Geneva: Council on Health Research for Development. COHRED Document No. 2000.3, Pg. 16.)

Category 1: Appropriateness

"Should we do it?"

Category 2 : Relevance

"Why should we do it?"

Category 3 : The Chance of success

"Can we do it?"

Category 4: Impact of the research outcome

"What will the stakeholders get out of it?"

43

Rating	Relevance	Avoidance of duplication	Feasibility	Political acceptability	Applicability	Urgency	Ethical acceptability
1	Not relevant	Sufficient information already available	Study not feasible considering available resources	Topic not acceptable to high level policy-makers	No chance of recommendations being implemented	Information not urgently needed	Major ethical problems
2	Relevant	Some information available but major issues not covered	Study feasible considering available resources	Topic more or less acceptable	Some chance of recommendations being implemented	Information could be used right away but a delay of some months would be acceptable	Minor ethical problems
3	Very relevant	No sound information available on which to base problem-solving	Study very feasible considering available resources	Topic fully acceptable	Good chance of recommendations being implemented	Data very urgently needed for decision-making	No ethical problems

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Scales for Rating Research Topics

(Source: Varkevisser, C.M., Pathmanathan, I., Brownless, A. 1991. Designing and conducting health systems research projects. Module 3: Identifying and prioritizing problems for research. In: Health Systems Research Training Series. International Development Research Centre and The World Health Organization. 2(Pt 1): 34.)

Relevance

- 1 = Not relevant
- 2 = Relevant
- 3 = Very relevant

Avoidance of duplication

- 1 = Sufficient information already available
- 2 = Some information available but major issues not covered
- 3 = No sound information available on which to base problem-solving

Feasibility

- 1 = Study not feasible considering available resources
 - 2 = Study feasible considering available resources
 - 3 = Study very feasible considering available resources
- #### Political acceptability
- 1 = Topic not acceptable to high level policy-makers
 - 2 = Topic more or less acceptable
 - 3 = Topic fully acceptable

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Sample List of Criteria

Okello D et al. (2000). A manual for research priority setting using the ENHR strategy (COHRED document 2000.3). Geneva, Council on Health Research for Development, p.13.

- Adequacy and usefulness of current knowledge base (avoiding duplication)
- Applicability of the research outcome
- Availability of cost-effective interventions
- Capacity of the system to carry out the research
- Community concerns/demands
- Economic impact
- Environment health and sociopolitical effects
- Equity focus
- Ethical and moral issues
- Feasibility
- Funding support
- Human rights issues
- Impact on health
- Impact on development

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Scales for Rating Research Topics (modified)

Applicability

- 1 = No chance of recommendations being implemented
- 2 = Some chance of recommendations being implemented
- 3 = Good chance of recommendations being implemented

Urgency

- 1 = Information not urgently needed
- 2 = Information could be used right away but a delay of some months would be acceptable
- 3 = Date very urgently needed for decision-making

Ethical acceptability

- 1 = Major ethical problems
- 2 = Minor ethical problems
- 3 = No ethical problems

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Continuation ...Sample List of Criteria

- Justification of cost/investment
- Justification of time
- Legal aspects
- Magnitude of the problem
- Obligation and professional responsibility/operational effectiveness
- Partnership-building
- Persistence of the problem
- Political will/acceptability/commitment
- Relevance
- Responsiveness to the national health policy or national goals
- Research capacity-building
- Research utilization
- Urgency

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Steps in the process of setting research priorities

- STEP 5 - The product of priority-setting processes
 - the type of event that would generate the product of the priority-setting process
 - the type of product that would be generated
 - measures to enhance the acceptability of the product

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Aligning resources toward research priorities

Allocation / re-allocation of resources



Implementation of priorities

52

Priority-setting decisions may be considered **LEGITIMATE AND FAIR** if they satisfy the following 4 conditions:



- Publicity
- Relevance
- Appeals
- Enforcement

•(Source: Daniels & Sabin, 1997)

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SUMMARY

Why Prioritize a Research Agenda

- Limited resources
- Balance interest of constituencies
- Coordination amongst players
- Local requirements
- Tool development vs. implementation
- Levels of intervention

53

NEXT STEPS

Moving from research priorities to research proposals

research priorities → research proposals

- Public call for "concept papers"
- Address the broad priorities from the perspective of specific discipline
- Develop research proposals
- Workshops for the development of research proposals

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SUMMARY

3 Approaches to PRIORITY SETTING

- ENHR
- 5-STEP (AD HOC)
- GFHR COMBINED MATRIX APPROACH

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Country Reports

Taiwan
Singapore
Nepal
Malaysia
Indonesia
Bangladesh
Japan
Philippines

Note: Participants were tasked to prepare beforehand a brief report on the health situation in their country (morbidity, mortality, burden of disease including current research priorities). Each member country representative presented their report in the workshop.

TAIWAN COUNTRY REPORT Cardiovascular Research in Taiwan

Dr. Ruey -Jen Sung



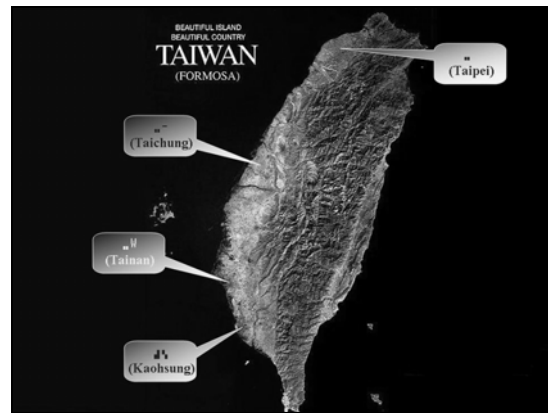
Key Points:

- In a population of 23 million, cancer is the leading cause of death for 23 consecutive years.
- Cardiovascular and cerebral vascular diseases are the next two causes of death in Taiwan.
- Basic and clinical researches in electrophysiology, genomics, atherosclerosis and hypertension are given priority in Taiwan.
- Funding and support for researches come from the industry, National Health Research Institute, the ministry and the National Science Council.
- Possible collaboration in epidemiology, genomics, cardiac arrhythmias and clinical trials must be explored for the Asia Pacific region as researches conducted are mostly based from the Western countries. People from the Asia Pacific region are genetically different from the people from Europe and America thus more researches in the region must be conducted.

Cardiovascular Research in Taiwan

Ruey J. Sung, MD, FACC, FAHA
Dean, College of Medicine
Vice President, National Cheng Kung University

1



3



2

Life Expectancy in Taiwan

Men: 73.4

Women: 79.3

4

Top 10 Causes of Death

2004年國人十大死因與十大癌症

排名	十大死因	十大癌症	男性十大癌症	女性十大癌症
1	惡性腫瘤	肺	肺	乳癌
2	心臟疾病	腦	心臟	乳癌
3	腦血管疾病	結腸	腦	乳癌
4	糖尿病	女性	女性	女性
5	事故傷害	胃癌	胃癌	子宮頸癌
6	肺炎	口腔癌	食道癌	胃癌

5

At least 10 people commit suicide each day

憂鬱國度 每天10人自殺

黃庭郁/台北報導

去年一年有三千四百六十八人自殺身亡，也讓自殺連續第八年擠進國人十大死因，依據衛生署最新統計，去年一年平均每天有十人死於自殺，其中三·五人選擇上吊結束性命。特別是高生產力的十五歲到四十四歲的青壯年，自殺死亡率連年攀升。

8

2004年國人十大死因與十大癌症

排名	十大死因	十大癌症	男性十大癌症	女性十大癌症
7	慢性肝病及肝硬化	子宮頸癌	攝護腺癌	膽囊癌
8	腎炎、腎衰竭及腎性病變	肝癌	肝癌	肝癌
9	自殺	食道癌	胰臟癌	淋巴瘤
10	高血壓性疾病	胰臟癌	鼻咽癌	白血病

資料來源：衛生署 資料整理：黃庭郁

6

Research Strengths in Cardiovascular Diseases

- Electrophysiology:
 - Basic: ion channel
 - Clinical: catheter ablation of arrhythmias
- Genomics and molecular medicine
- Atherosclerosis
- Hypertension

9

Cancer is the top cause of death for the 23rd consecutive year

▲衛生署統計室黃旭明主任公布九十三年國人十大死因統計，惡性腫瘤已連續二十三年蟬聯榜首，肺癌有取代肝癌趨勢。(沈明杰攝)

10大死因 癌症連續23年居首

黃庭郁
衛生署昨
平均每天
除了肺結核
已成爲青
與民國八
命增加了一
了五歲；顯
九人死於
疾病、腦血
炎、糖尿病
十大死因
名對調，慢
肺炎死亡率
在男性十
管疾病、事
著其次爲
九十二年
爲結腸直腸
二十七秒
黃旭明說
十歲以上
間、預期未
事故傷害與

7

Funding Mechanisms

- National Science Council (NSC)
- National Health Research Institute (NHRI)
- Industry

10

Areas for Collaboration

- Epidemiology
- Cardiac arrhythmias
- Genomics
- Clinical trials

11



Thank you for your attention!



12

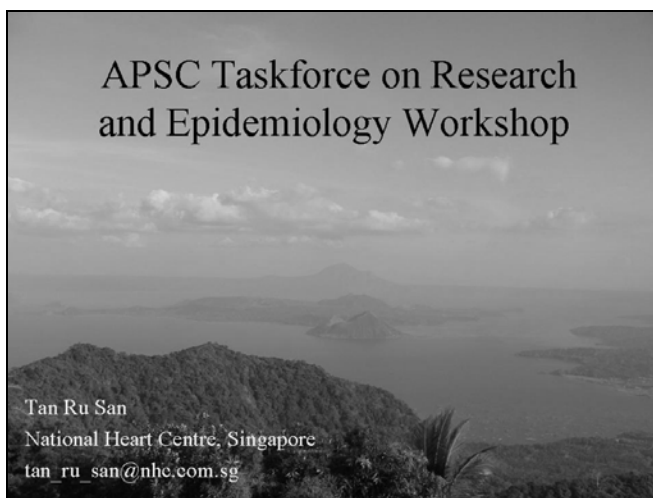
SINGAPORE COUNTRY REPORT

Dr. Tan Ru San

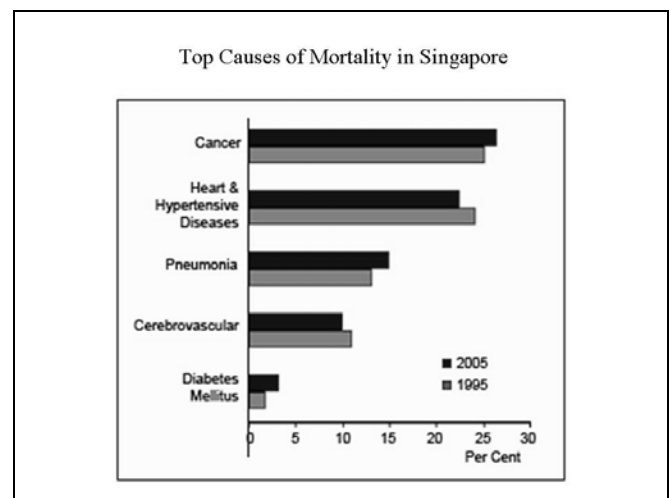


Key points:

- Top causes of mortality in Singapore are cancer, heart and hypertensive diseases, pneumonia and cerebrovascular diseases.
- Burden of cardiovascular disease is high in Singapore based on the high hospital discharge diagnosis attributed to circulatory disorders (heart and stroke).
- The new health minister has prioritized programs and researches pertaining to healthy lifestyle, preventive medicine and infectious diseases.
- The National Medical Research Council allots high funding for basic research..
- Cardiac researches focus on national registries.
- The disease registry is based on ad hoc and survey basis. There is no true data on disease prevalence.
- The Economic Development Board gives priority to researches with potential applications of marketability.
- Translational research is also considered for funding.
- There is limited funding for clinical epidemiology and clinical research. Clinical researches do not possess marketability since no product can be sold thus it is anticipated that the APSC meeting would change this predicament.



1



2

Top 10 Hospital Discharge Diagnoses, % of Total Hospital Discharges

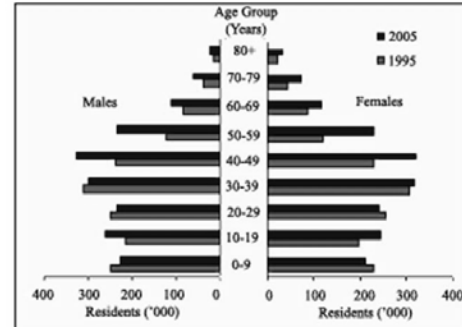
	2002	2003	2004
Accidents, Poisoning & Violence [ICD9 : 800-999]	9.1	9.0	8.9
Cancer [ICD9 : 140-208]	5.3	5.3	5.4
Ischaemic Heart Disease [ICD9 : 410-414]	3.9	3.7	3.8
Pneumonia [ICD9 : 480-486]	2.3	2.6	2.4
Cerebrovascular Disease (including stroke) [ICD9 : 430-438]	2.6	2.6	2.4
Other Heart Diseases [ICD9 : 393-398,402,415-429]	2.3	2.2	2.3
Chronic Obstructive Lung Disease [ICD9 : 490-493,496]	2.2	2.1	2.2
Complications related to Pregnancy [ICD9 : 640-648]	2.4	2.3	2.1
Dengue [ICD9 : 061]	1.0	1.4	2.1
Obstetric Complications affecting Fetus or Newborn [ICD9 : 761-763]	0.4	1.3	1.0

3

Age Structure in Singapore

Age structure
 0-14 years: 15.6%
 15-64 years: 76.1%
 ≥ 65 years: 8.3%

Median age
 total: 37.3 yrs
 male: 36.9 yrs
 female: 37.6 yrs



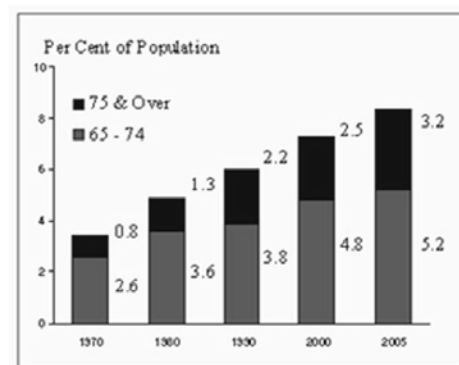
6

Top 10 Hospital Discharge Diagnoses, % of Total Hospital Discharges

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4

% Elderly in Singapore Population



7

National Health Priorities

- Degenerative Disease due to Aging Population
- Preventive Medicine
- Infectious Diseases

5

National Health Research Priorities

- Cell & Gene Research
 - ‘Biopolis’
 - Institute of Cell & Molecular Biology
- Biotechnology Enterprise
 - Device
 - Telemedicine

8

National Cardiac Research Priorities

- National Myocardial Infarct Registry
- Clinical Research
 - Limited funds
- Translational Research
 - Competitive funding from National Research Funding Agencies

NEPAL COUNTRY REPORT

Health Issues and Status of CVD in Nepal

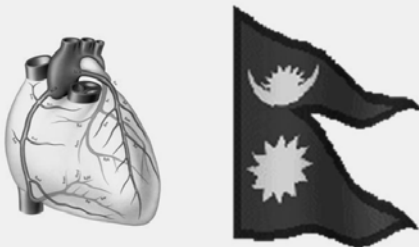
Dr. Prakash Raj Regmi



Key points:

- Leading causes of death in Nepal are infectious disease, maternal and child health problems and malnutrition.
- Infant, child and neonatal mortality rate in Nepal are among the highest in Asia.
- The five top most common diseases are skin diseases, ARI, diarrheal diseases, intestinal worms, and gastritis.
- The government budget allocation for health is only 5% but contribution from the private sector is significant (70%).
- Common heart diseases: hypertension, coronary heart disease, rheumatic and congenital heart disease.
- Coronary risk factors are hypertension, smoking, diabetes, dyslipidemia, and heredity
- Coronary heart disease is increasing rapidly.
- Priorities in health care and research are based on the country's leading causes of death, which are infectious disease, malnutrition, etc. (most of the budget is allocated to these priorities).
- Community based data on disease prevalence is needed.
- Prevention and treatment of cardiovascular diseases are not included among the country's priority.
- Community based surveys are highly required to prove prevalence of CVD so that the government may prioritize it.

Health issues and Status of CVD in Nepal



Dr. Prakash Raj Regmi MD
Consultant cardiologist
Bir Hospital

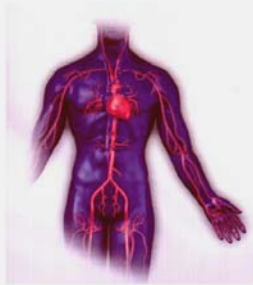
NEPAL- general information

- 
- Population 25mn
 - Population growth rate 2.2 %
 - Adult (15+) literacy rate 48 %
 - Per Capita Income 240 USD
 - GPD per capita 1310 USD
 - Population below poverty line 31%
 - Safe drinking water 70% population
 - Life expectancy at birth 62yrs

1

2

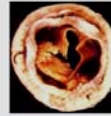
NEPAL- health information



- Infant mortality rate **65/1000 live births**
- Under 5 child mortality rate **91/1000**
- Neonatal mortality rate **39/1000**
- Maternal mortality rate **536/100000**
- 5 top most common diseases – **Skin diseases, ARI, Diarrhoeal diseases, Intestinal worms, Gastritis**

3

Disease prevalence



- Malnutrition **47% under 5 children**
- ARI **23 % under 5 children**
- Diarrhoea **18% under 5 children**
- HTN **19% adult above 18 yrs**
- RHD **1.2/1000 school age children**
- CAD **< 3 % adult above 35 yrs**

6

Contd...

Nepal- health information



- No. of govt. hospitals **87**
- No. of doctors **1235**
- No. of cardiologists **60**
- Proportion of national budget allocation to health **5%**
- Major public health problems: **Infectious diseases, maternal and child health, malnutrition**

4

Leading causes of death

In hospital mortality

Children

ARI
Diarrhoea
Septicemia

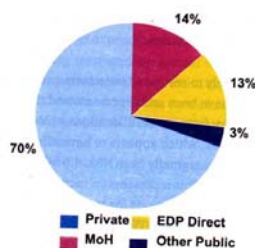
Adults

COPD
CVA
CCF

- Community based data not available
- No death registry system
- Lack of postmortem facilities
- Most death occur out of hospital

7

Composition of health expenditures



- Private sector **70%**
- MoH **14 %**
- External Development Partners **13%**
- Other **3%**

5

Causes of death

Disease	Overall mortality	DALYs lost
Group I	49.7 %	68.5%
Infectious diseases		
Maternal and child health problems		
Nutritional problems		
Group II	42.1%	22.8%
Non-communicable diseases		
Congenital diseases		
Group III	6.9%	8.7%
Injuries		
Accidents		

8

Burden of CVD – Community data

Disease Prevalence Disease Prevalence

Hi V	50 /10000	HTN	19% adults>18yrs
TB	10 /10000	RHD	1.2 /1000 children
Leprosy	4.4 /10000	Cong.HD	1.4 / 1000 children
Malaria	3.7 / 10000	CAD	< 5 % adults >35yr
Kala-Azar	2.3 / 10000		

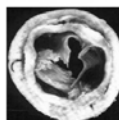
Most common heart diseases in the community : HTN
RHD/ CHD
CAD

9

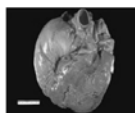
CVD TREND



CAD increasing rapidly
(5 folds in 10 yrs)



RHD stable



Myocarditis decreasing

12

Burden of CVD – hospital data

Disease	Burden (hosp. admission)
CVD	20% of all medical adm.
CAD	40% of all cardiac adm.
RHD	20%
Cardiomyopathy	9.1%
HTN	7 %
Cong.HD	6 %

10

Health Care Priorities



P 1 inf. Disease control
safe motherhood
nutritional support,
primary health care



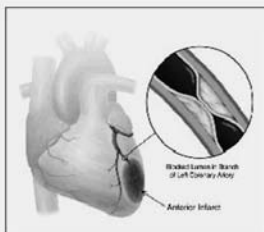
P 2 Health education

P 3 Tertiary health care

13

Coronary Risk Factors

Angiographically proven CAD



■ HTN	73 %
■ Smoking	65 %
■ DM	34 %
■ Dyslipidemia	32 %
■ Heridity	17 %

11

RESEARCH PRIORITY OF THE COUNTRY

- P 1 Community based works on
Infectious diseases control
ARI Malnutrition
Diarrhoea MCH
HIV/ AIDS Immunization
- P 2 Health education and training
- P 3 Hospital care (Tertiary)

14

Financial contribution on health care

Items	% Dev. Budget	Contribution	
		HMG	Donor
Infections	0.58%	100%	-
TB	11.15%	22.4%	77.6%
FP/MCH	1.8%	86 %	14%
Diarrhoea	3.56 %	25 %	75 %
Leprosy	0.75 %	27 %	73 %
Heart diseases	< 0.01 %	+	-

15

Conclusions

- 3 leading causes of death in Nepal are Infectious diseases, maternal and child health problems and nutritional problems
- The 3 most common Cardiac problems are HTN, RHD and CAD
- CAD is on rapid rise, RHD is stable and Myocarditis is declining
- Priority of health care and research till date goes to leading causes of death.
- Almost no national data available on cardiovascular problems
- Non –communicable diseases are nowhere in the govt priority list
- Priority of Cardiac society on CV research goes to ACS, Coronary risk factors and RHD

18

Status of heart care services

- 1 National heart centre with 100 beds
- 3 Cath. labs
- 60 Cardiologists (10 Cardiac surgeons)
- No national heart policy
- National heart disease prevention programs
- Some works done by Nepal Heart Foundation
- Focal point on Non communicable diseases under MOH
- RHD Prevention works by Nepal Heart Foundation
- Community based surveys are very limited

16

THANK YOU



19

Research priority of Cardiac Society

- P 1 ACS (Rapidly increasing problem)
Main cause on admission
Main cause of cardiac death
- P 2 Coronary risk factors
- P 3 RHD

Community based surveys are highly required
To prove the high prevalence in the community
To include somewhere in the priority list of the govt.

17

MALAYSIA COUNTRY REPORT*

Dr. Datuk N. Arumugam



“We all know the problem but what research do we want to do?”

Key points:

- Primary concerns:
 - Is there a lack of research?
 - Is the implementation of results lacking?
 - What research do we want to prioritize?
 - Who should address health issues?
- Based on statistics, 260 million Asians will die of chronic lifestyle diseases and most of the poor countries (e.g. China, Pakistan, and Indonesia) will be facing this death threat in the next decade.
- The leading causes of death in the world are cancer, respiratory and heart diseases.
- In Malaysia, the leading causes of death are ischemic heart disease, road traffic accidents, cardiovascular diseases and stroke.
- Most countries possess basic epidemiological data and information but most of these countries do not know who should address these health concerns.
- The Five-year Malaysian plan was launched to enhance research and development as one of its strategies to promote health capacity and stability in the country.
- The Institute of Malaysian Research conducts research in infectious diseases and malaria. In the Malaysian Plan, the government mandated to integrate researches together thus the creation of the National Institute of Health was established to coordinate seven major players including the universities to come together to do research.
- Research is important but implementation of its results is seldom carried out. Primary prevention in the case of smoking cessation should be taken seriously. Focus must be geared towards ways of implementing results to policies.
- APSC must focus on implementation of results and must address the problem pertaining to chronic lifestyle diseases.

* Note: no slide presentation

INDONESIA COUNTRY REPORT

Leading Causes of Death in Indonesia

Cardiovascular Research Priorities in Indonesia

Prof. I. Wayan Wita



Key Points:

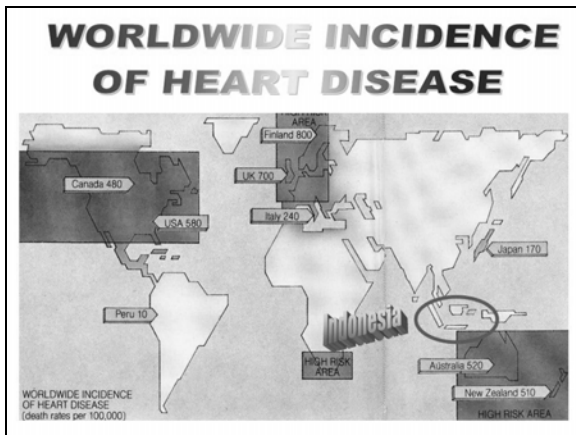
- Top causes of death in Indonesia are cardiovascular diseases, infectious disease, respiratory diseases
- Non-communicable and infectious diseases are both increasing in number thus becoming a double burden to the country
- Smoking is still high in the country
- Cardiovascular research priorities:
 - Cardiometabolic Epidemiologic Study. This is the trend in Indonesia. The pilot study was conducted in Bali and shall be applied nationwide.
 - CV risk factor surveys (national). Diabetes and hypertension are the major risk factors emerging in the country.
 - Hypertension, rheumatic heart disease and acute coronary syndrome are among the registries developed in the country.



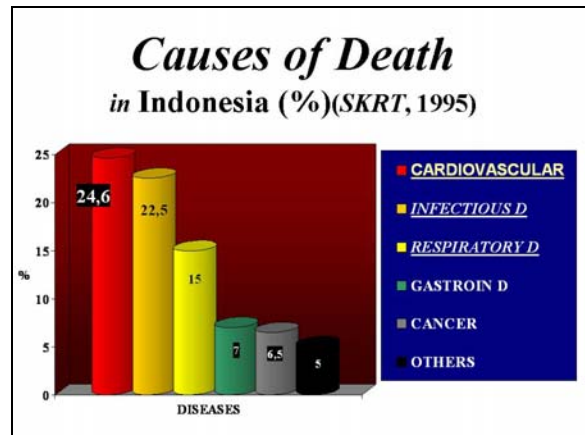
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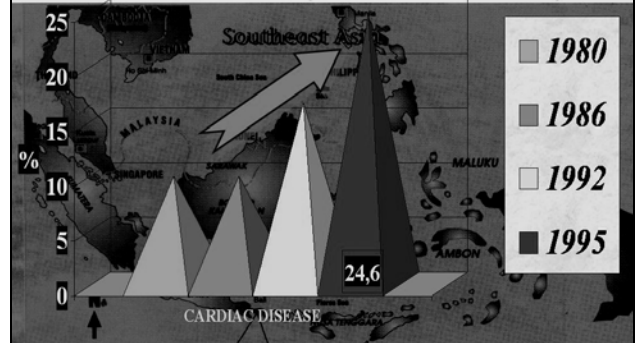
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**CVD: the largest
Cause of death..**

**24.6 % of
all death
(1 out every 4
deaths)**

5

*Cardiovascular Deaths
in Indonesia (SKRT, 1980-1995)*



8

**CVD: the Proportion
of Population
Death under 65 years**

**1/6 of total
deaths**

6

**1984-2000: CVD Death
already declined 22%**

**Absolute
number of death dropped
only by 3% in population**

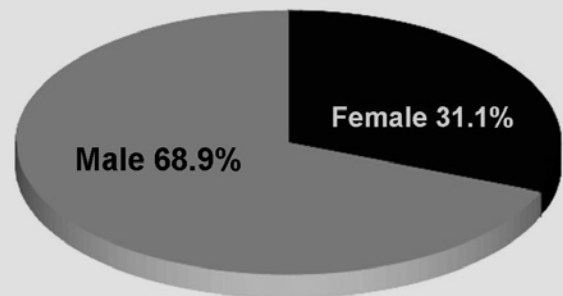
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**CVD: the size
of this epidemic
is likely to Increase**

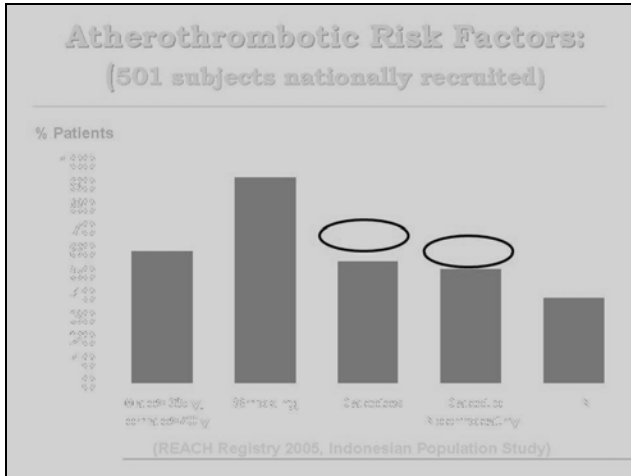
- Population are ageing
- Advances in treatment lead to an increasing number of MI survivors

7

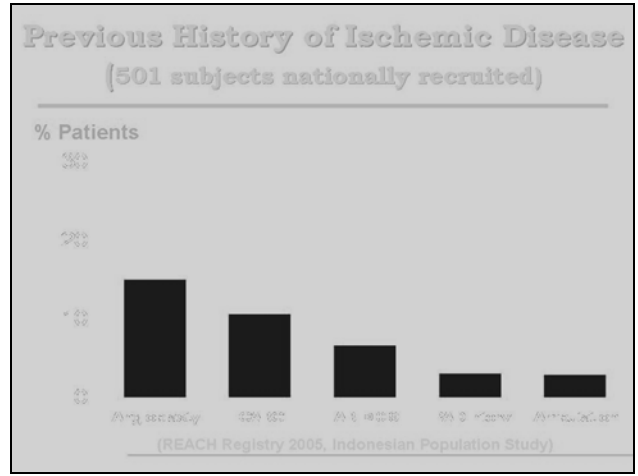
**Proportion of gender having CVD
in Indonesia (National Data)**



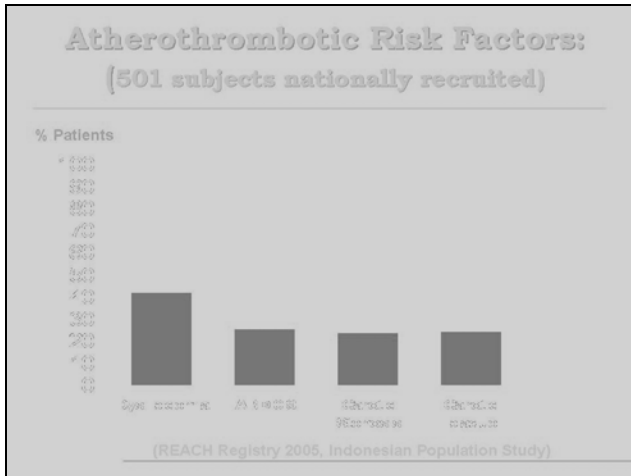
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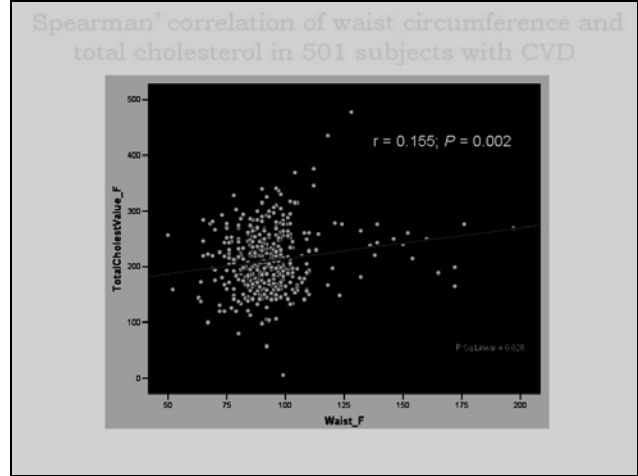
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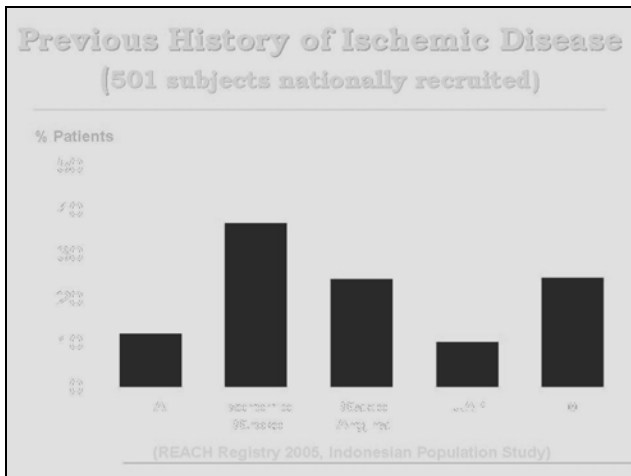
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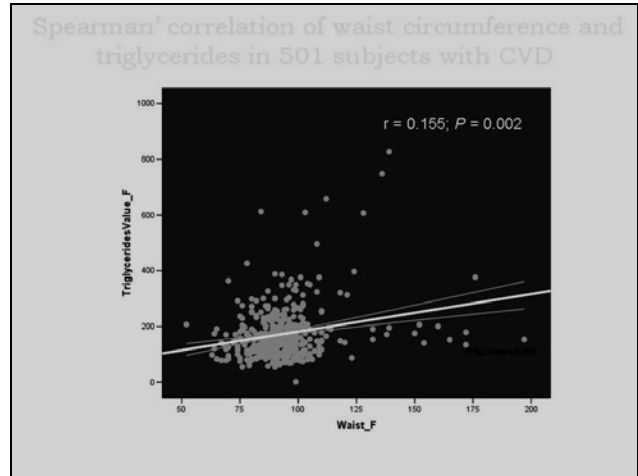
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16

Summary

- ❖ → **Cardiovascular Disease** *the leading cause of death in Indonesia*
- ❖ → **The 3 causes of death:** *Cardiovascular Disease, Infectious D., and Gastrointestinal D.*

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Cardiovascular Research Priorities in INDONESIA

Wayan Wita, Anwar Santoso
Indonesian Heart Association

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Terima Kasih

Thank You

18

Cardiovascular Research Priorities

1. *Cardiometabolic Epidemiologic Study*
2. *CV risk factors surveys (national)*
 - a. National Diabetes Mellitus survey
 - b. National Hypertension study
 - c. National Lipid Survey
3. *Clinical research (hospital based)*
 - a. Acute Coronary Syndromes Registry
 - b. Heart Failure Registry
 - c. Rheumatic Heart Disease Registry
 - d. Hypertensive Emergency/Urgency Registry

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19

CORONARY ARTERY DISEASE PREVENTION

- Primary prevention
 - ◆ Health promotion
 - ◆ Specific protection
- Secondary prevention
 - ◆ Early diagnosis & prompt treatment
 - ◆ Disability limitation
- Tertiary prevention
 - ◆ Rehabilitation

22

Note : Cardiometabolic study results were not presented and discussed in the workshop.

Bali Cardiometabolic Study, 2005

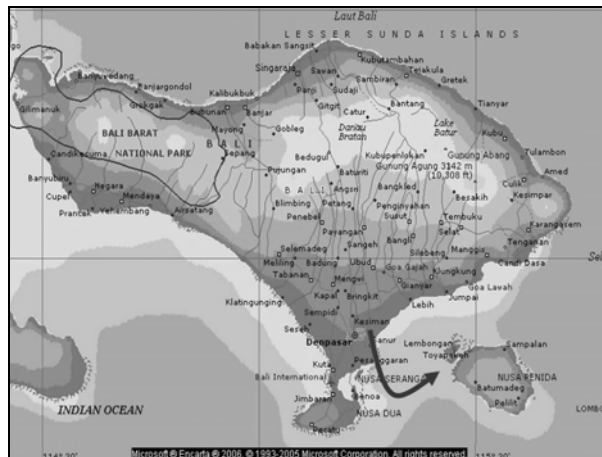
(Santoso A, Gunadhi P, Wita W et al.: Bali Cardiometabolic Study, 2005)

23

Accessible population

- Eligible residents in village of Nusa Ceningan aged 20 – 99 years.
- Study subjects → determined using stratified random sampling technique
- All subjects provide informed consent to take part in the study, after having known the aim of the study.

26



24

Measurements and procedures

- Anthropometric measures → height, weight and waist circumference
- Rose angina questionnaires (1982) PE and 12-leads ECG → Minnesota code for myocardial infarction & ischemia
- Apo-B and apo-1 → immunoturbidimetric assays (Tina quant apo-B version-2 & apo-A version 2) → automated analyzer

27

Background

- CHD → leading cause of death in INA
- National Household Survey (1995) → CVD mortality was 24.6% of all-cause mortality in Province of Bali
- Central obesity → emerging RF of CHD
- ORs of central obesity → 1.62 for AMI

25

Statistical analysis

- Kolmogorov-Smirnov and Leven's test → to test the data distribution & homogeneity of variance
- Correlations test → Pearson & Spearman test.
- General linear model → for multiple linear regression analysis
- Multiple logistic regression analysis → for measuring 'prevalence ratio' of predictors on CHD

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Results of the Study

29

Multivariate Logistic Regression of Atherothrombosis Risk Factors on CVD

Variables	Prevalence Ratio	95% CI	P
Waist Circ	1.24	0.82 – 1.89	0.315
Systolic BP	1.76	0.98 – 3.20	0.054
Diastolic BP	1.48	0.84 – 2.58	0.169
Total Chol	1.28	0.82 – 2.00	0.272
Triglyceride	1.13	0.73 – 1.77	0.573
Blood glucose	1.51	0.97 – 2.33	0.063

(Santoso A, et.al. REACH Registry 2005; in process)

32

Multivariate linear regression analysis between Diastolic Blood Pressure, Total Cholesterol, and Triglycerides with Central Obesity

Factors	beta	T-value	P-values
Diastolic blood pressure	0.131	28.0	0.008
Total cholesterol	0.082	1.560	0.120
Triglyceride	0.170	3.193	0.002
Constanta		10.152	0.000

(Santoso A, et.al. REACH Registry, 2005)

30

Clinical Characteristics of Control & CHD in Bali

	No CHD (n = 270)	OMI (n = 24)	Myocard Isch (n = 11)
Age (yr)	40.5 ± 15.8	65.0 ± 13.9 *	58.5 ± 15.0 *
Sex (M:F)	29 : 82	31 : 43 *	24 : 24 *
BMI (kg/m ²)	21.5 ± 3.4	19.8 ± 3.8 *	19.5 ± 1.8
WC (cm)	75.8 ± 9.3	71.5 ± 9.0	70.2 ± 6.8
SBP (mmHg)	116.0 ± 18.5	132.4 ± 22.5 *	124.7 ± 15.3
DBP (mmHg)	73.8 ± 10.6	81.0 ± 10.6 *	75.4 ± 8.7
FBS (mg/dl)	96.4 ± 34.5	111.8 ± 55.6	118.5 ± 78.6
SC (mg/dl)	1.0 ± 0.17	1.1 ± 0.3	0.8 ± 0.1 *
UA (mg/dl)	5.4 ± 1.3	5.9 ± 1.6	4.9 ± 1.3

**P<0.05 vs control group

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Univariate Logistic Regression of Atherothrombosis Risk Factors on CVD

Variables	Prevalence Ratio	95% CI	P
Waist Circ	1.16	0.82 – 1.66	0.386
Systolic BP	2.32	1.58 – 3.39	0.000
Diastolic BP	2.35	1.62 – 3.42	0.000
Total Chol	1.21	0.83 – 1.78	0.317
Triglyceride	1.05	0.71 – 1.55	0.793
Blood glucose	1.22	0.82 – 1.79	0.316

(Santoso A, et.al. REACH Registry 2005; in process)

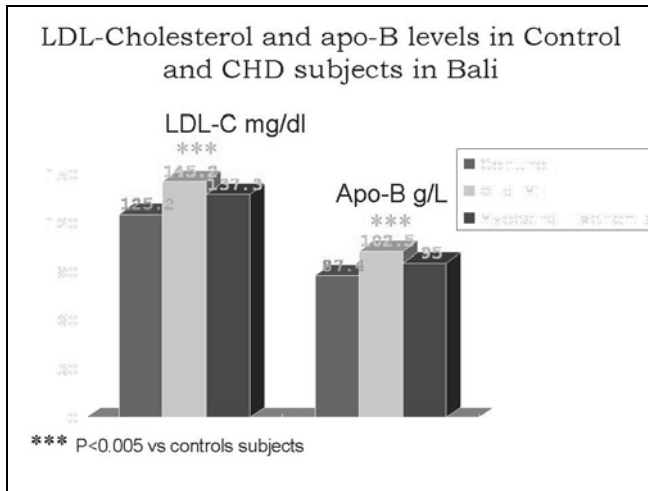
31

Clinical Characteristics of Control & CHD in Bali

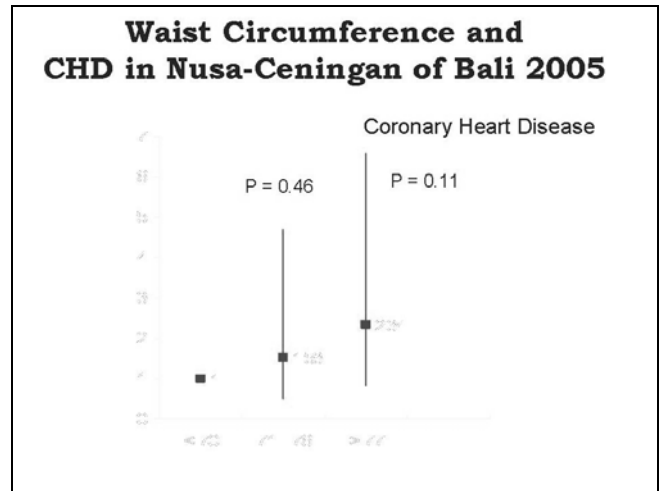
	No CHD (n = 270)	OMI (n = 24)	Myocard Isch (n = 11)
TC (mg/dl)	196.5 ± 37.8	226.3 ± 38.7 *	216.4 ± 34.5
TG (mg/dl)	99.6 ± 50.3	119.1 ± 35.8	104.3 ± 41.5
HDL (mg/dl)	57.4 ± 11.6	62.4 ± 15.7	60.5 ± 11.7
LDL (mg/dl)	125.2 ± 31.7	145.1 ± 27.1 *	137.4 ± 22.9
TC/HDL	3.5 ± 0.8	3.7 ± 0.9	3.7 ± 0.8
apo-B (g/L)	87.4 ± 22.1	102.5 ± 19.4 *	95.0 ± 16.5
apo-A (g/L)	123.8 ± 17.2	132.8 ± 25.6 *	130.6 ± 17.1
apoB/apoA	0.72 ± 0.2	0.80 ± 0.2	0.74 ± 0.2

**P<0.05 vs control group

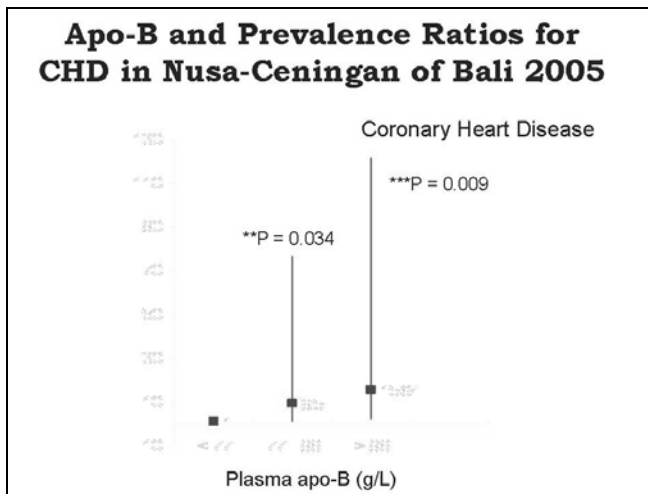
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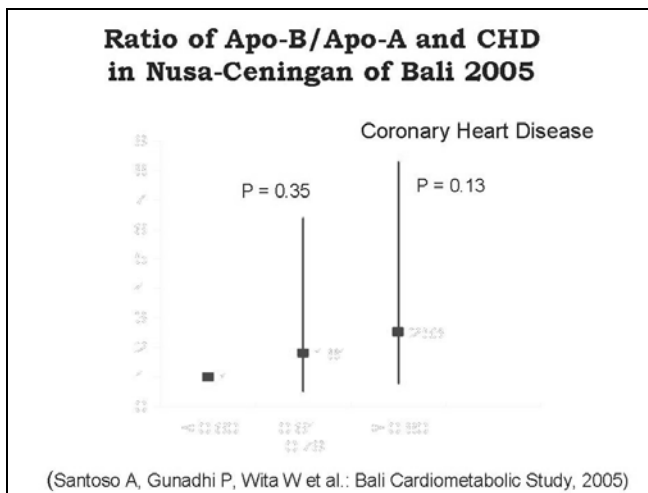
36

Stepwise Multiple Logistic Regression Analysis of Factors Associated with CHD Patients

Factors	PRs (95% CI)	P value
Age	13.6 (3.9 - 46.7)	P = 0.00
Apo-A	0.18 (0.04 - 0.83)	P = 0.03
Apo-B	9.3 (0.7 - 113.7)	P = 0.08
SBP	1.08 (0.4 - 3.5)	P = 0.8
FBS	1.08 (0.4 - 3.5)	P = 0.9

* Prevalence ratios (PRs) adjusted for age, apoB, apoA, SBP, blood sugar were calculated.

39



37

Prevalence of CHD in Bali = 11.47%

(Santoso A, Gunadhi P, Wita et al.: Bali Cardiometabolic Study, 2005)

40

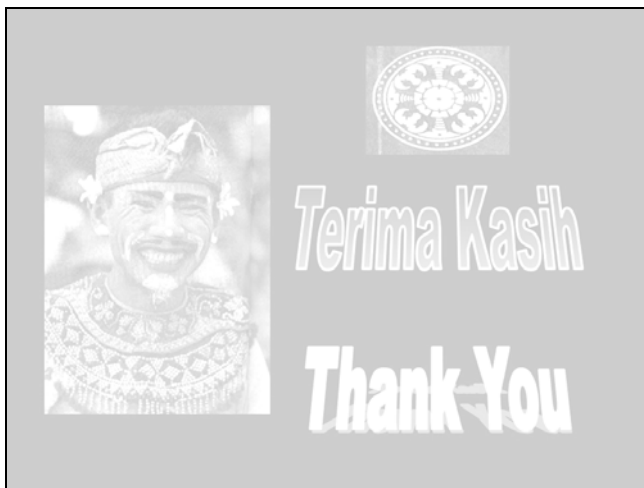
Cardiovascular Research Priorities

1. *Cardiometabolic Epidemiologic Study*
2. *CV risk factors surveys (national)*
 - a. National Diabetes Mellitus survey
 - b. National Hypertension study
 - c. National Lipid Survey
3. *Clinical research (hospital based)*
 - a. Acute Coronary Syndromes Registry
 - b. Heart Failure Registry
 - c. Rheumatic Heart Disease Registry
 - d. Hypertensive Emergency/Urgency Registry

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42



43

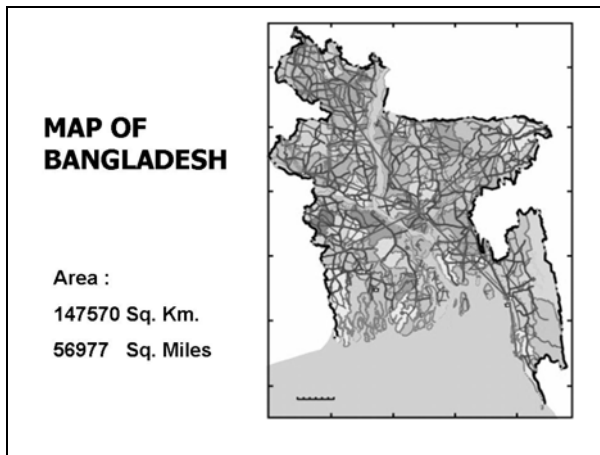
BANGLADESH COUNTRY REPORT

Prof. AKM Mohibullah

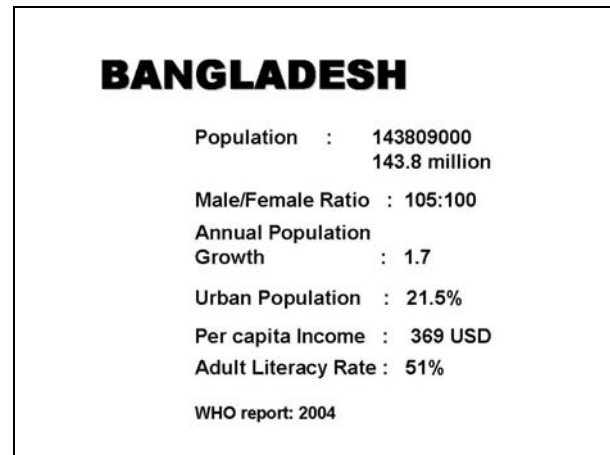


Key points:

- Top causes of death in Bangladesh are respiratory diseases, diarrhea and cardiovascular diseases
- Epidemiological data is very minimal in Bangladesh. There is a need for epidemiological data on cardiovascular disease
- Types of CVD prevalent in the country are hypertension, ischemic heart disease, and congenital heart disease among others.
- Risk factors range from smoking, hypertension, dyslipidemia and diabetes.
- Most researches are conducted by the government
- The Bangladesh Cardiac Society mainly conducts clinical researches and funding comes from other agencies



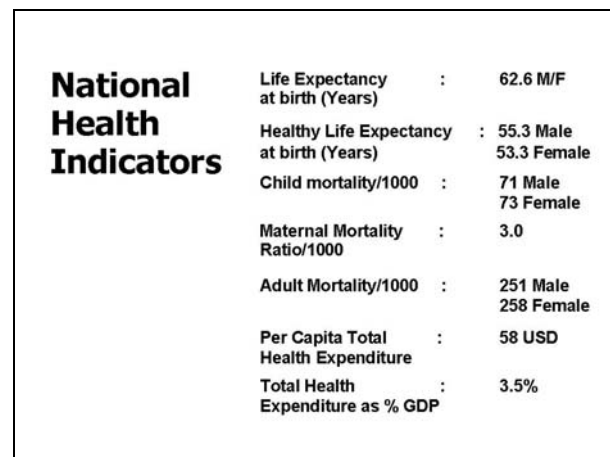
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4

Top 20 Causes of Deaths By Sex in 2000

Cause of deaths	Both sex	Male	Female
Total (top 20 causes)	63.38	62.26	64.34
01. Old age complications (senility)	12.09	11.07	13.50
02. Asthma	6.04	6.24	5.77
03. Stroke/Paralysis	5.71	6.62	4.46
04. Fever	4.99	4.35	5.88
05. Heart disease	4.89	5.87	3.54
06. Pneumonia	4.18	3.41	5.24
07. Diarrhoea	3.35	3.12	3.67
08. Hypertension	2.91	3.31	3.36
09. Gastritis/Peptic ulcer	2.42	2.65	2.10
10. Diabetes	2.36	2.65	1.97
11. Drowning	2.20	2.18	2.23
12. Hepatitis-B	1.81	1.51	2.23
13. Tuberculosis	1.70	1.42	2.10
14. Malnutrition	1.65	1.80	1.44
15. Typhoid	1.48	1.14	1.97
16. Tetanus (after delivery)	1.21	-	1.21
17. Accident and Injuries	1.15	1.70	0.39
18. Cancer (all types)	1.10	1.32	0.79
19. Tetanus	1.10	1.14	1.05
20. Anaemia	1.04	0.76	1.44

Source: Health and Demographic Survey, 2000, Bangladesh Bureau of Statistics.

5

Pattern of Cardiac Diseases in Bangladesh 1974-1976

Total No. of population surveyed : 7062

No. of Heart Disease Detected : 207 (2.9%)

Hypertension	: 83 (1.10%)
Rheumatic Heart Diseases	: 53 (0.75%)
Ischaemic Heart Diseases	: 24 (0.33%)
Congenital Heart Diseases	: 13 (0.18%)
Arrhythmia	: 16 (0.22%)
Others	: 18 (0.25%)

8

Leading cause of deaths in the country

1. Respiratory and Infectious Diseases
2. Diarrhoeal and GI diseases
3. Cardiovascular diseases

6

Pattern of Cardiac Diseases in Bangladesh 1979-1980

Total No. of population surveyed : 5000

No. of Heart Disease Detected : 230 (4.6%)

Hypertension	: 105 (2.1%)
Ischaemic Heart Diseases	: 66 (1.3%)
Rheumatic Heart Diseases	: 39 (0.78%)
Congenital Heart Diseases	: 11 (0.22%)
Others	: 9 (0.18%)

Akhter Hussain, Bangladesh Heart Journal, 1984.

9

All types of cardiovascular diseases are seen in Bangladesh.

1. Rheumatic Heart Disease
2. Ischaemic Heart Disease
3. Hypertension
4. Congenital Heart Disease
5. Arrhythmias, Cardiomyopathies, Myocarditis etc.

7

Pattern of Cardiac Diseases in Bangladesh 1984-1986

Total No. of population surveyed : 1619

No. of Heart Disease Detected : 97 (5.9%)

Hypertension	: 43 (2.65%)
Ischaemic Heart Diseases	: 28 (1.72%)
Rheumatic Heart Diseases	: 16 (0.98%)
Congenital Heart Diseases	: 5 (0.30%)
Others	: 5 (0.30%)

10

Prevalence of Cardiac Disease in Bangladesh

Investigators	Years	Total Population	No. of Cardiac Cases	Percentage
Malik et al	1974-75	7062	207	2.9
Hossain A	1979-80	5000	203	4.6
Malik et al.	1984-86	1619	97	5.9

11

Prevalence of CHD, sHTN and dHTN in NIDDM subjects at the time of diagnosis by sex and area

Prevalence (%)	Disease events	n	CHD	sHTN (SBP>140mmHg)	dHTN (DBP>90mmHg)
Sex					
	Men	295	16.6	19.3	11.2
	Women	398	20.1	26.1	15.3
	M + W	693	18.6	23.2	13.6
Area					
	Rural	174	17.8	18.4	5.7
	Urban	519	18.9	24.9	16.2

14

Pattern of Cardiovascular Diseases in Bangladesh

Cardiovascular Diseases	Malik et al. 1974-75 n-7062	A.Hossain 1979-80 n-5000	Malik et al. 1984 - 86 n-1619
Hypertension	1.10%	2.1%	2.65%
Ischaemic Heart Disease	0.33%	1.3%	1.72%
Rheumatic Heart Disease	0.75%	0.75%	0.98%
Congenital Heart Disease	0.18%	0.22%	0.30%
Others	0.25%	0.25%	0.30%

12

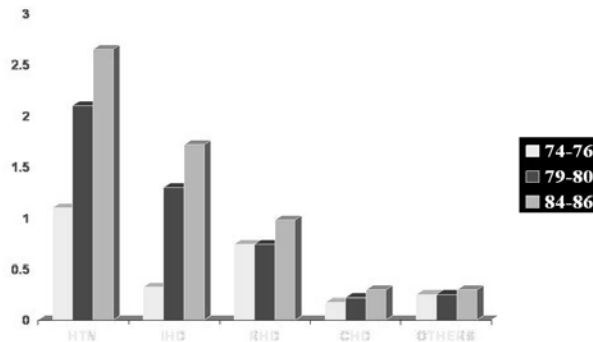
From July1995-1997

4410 Cardiac Patients were Admitted in 13 Regional and Tertiary Hospitals

34% patients were of Ischaemic Heart Diseases

15

Pattern of Cardiovascular Diseases in Bangladesh



13

Pattern of Cardiovascular Diseases in Sir Salimullah Medical College in last 5 years

Diseases	No. of Patients					Total	%
	2000	2001	2002	2003	2004		
Ischaemic Heart Diseases	596	603	725	693	630	3247	52
Hypertension	292	248	316	334	213	1403	22.4
Rheumatic Heart Diseases	176	161	66	84	55	542	8.6
Congenital Heart Diseases	33	36	25	29	23	146	2.3
Others	154	169	161	206	210	900	14.4
Total	1251	1217	1346	1346	1131	6238	100

16

RISK FACTORS PROFILE IN PATIENTS WITH IHD

Smoking	52 - 70%
Hypertension	30 – 48%
Dyslipidaemia	29 – 51%
Diabetes Mellitus	23 – 39%
No major risk factors:	6% - 9%

J Bangladesh Coll Phys Surg 1996; 14:94-97
 J. Inst. Postgrad. Med. Res. 1998;13:5-8
 Chest and Heart Bulletin, 1998;22:49-52

17

SUMMARY

Cardiovascular diseases are increasing in Bangladesh

The Prevalence of the disease raised from 29 per thousand to 59 per thousand by 10 years.

Ischaemic Heart Disease – most common cardiovascular disease increased from 3.3 per thousand to 17 per thousand indicating 5 fold increase of the disease.

20

Health Sector Research Activities

Government :

Bangladesh Medical Research Council

Very few epidemiological survey in cardiovascular diseases

Bangladesh Cardiac Society :

Organizationally no epidemiological survey.

Individual Members : Mostly clinical research

18

With the decline of the mortality due to Infectious and diarrhoeal diseases and deaths from perinatal cause -

cardiovascular diseases particularly

Ischaemic Heart Disease will be the major health problem and No. 1 killer disease in our country.

Contd...

21

Bangladesh Cardiac Society

Formed in 1982

Total members : 300

Activities: **Seminars**
 Publication of Journal (Bangladesh Heart Journal)
 CME program
 Conferences
 International relations : WHF, APSC, SAARC Cardiac Society

Fund : **Membership Fee**
 Conferences



19

Socio-economic improvement and changes in life style in respect of

increase in tobacco consumption and saturated fat intake, decrease in physical activity, increasing body weight and

consequently increasing rate of diabetes mellitus, hypertension and dyslipidaemia in the population

contribute to this increase in ischaemic heart disease.

22

JAPAN COUNTRY REPORT

Ms. Mary Mosley



Key points:

- Dr. Akira Matsumori (APSC Japan) through Ms. Mosley, has invited member countries interested to join him in the study: “A study of Hepatitis C virus infection in myocarditis cardiomyopathies and heart failure.” (See Appendix) The study aims to measure the worldwide distribution of myocarditis, cardiomyopathies and heart failure due to HCV infection. Prevalence of HCV genomes in specific regions will be compared. Those interested were asked to contact APSC Japan.
- Akira Matsumori, MD, PhD
Telephone : 81-75-751-3186
Fax : 81-75-751-6477
E-mail : amat@kuhp.kyoto-u.ac.jp
Address :
Department of Cardiovascular Medicine
54 Kawahara-cho, Shogin, Sakyo-ku
Kyoto, 606-8507, Japan

PHILIPPINE COUNTRY REPORT Burden of CVD in the Philippines

Dr. Helen Ong-Garcia



“Awareness of health care is growing.”

Key points:

- The population continues to increase in the Philippines but the bulk of the population is below 40 years of age brought about by improved health care.
- The main source of income for half of Filipino families comes from wages and salaries.
- While food is a major expense of most families, health expenditures only represent 2% of family expenditures. The patient foot major healthcare spending because of low taxes.
- Diseases of the heart and vascular system are the top causes of mortality.
- Smoking is prevalent in the country as well as in other countries. Implementation of national policies regarding smoking has remained a problem for several years. Industrial policies prevail.
- Cardiovascular disease is the leading cause of death and disability in the Philippines.
- PHA research priorities:
 - Implementing clinical practice guidelines
 - Burden of disease
 - Identifying burden of illness and quality of life studies on cardiovascular disease
 - Improving and identifying quality of care studies



Burden of CVD in the Philippines

1

Objectives:

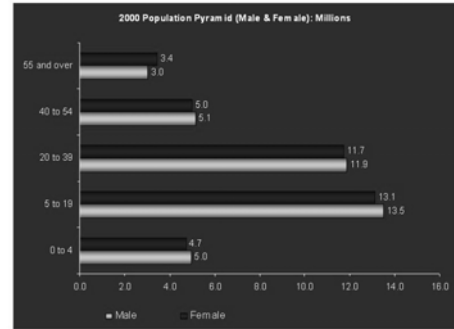
1. To present the burden of Cardiovascular Disease in the Philippines
2. To present research priority at the national level
3. To present research priorities of the Philippine Heart Association

2

CVD Burden in a Developing Country

3

The bulk of the Filipino population is below 40 years old.



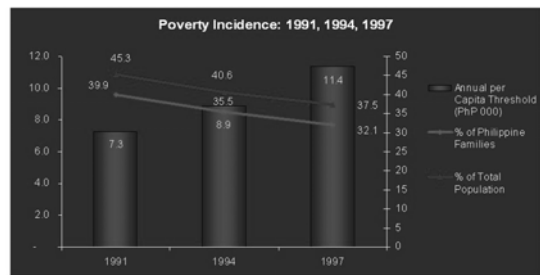
Source: PSY 2003

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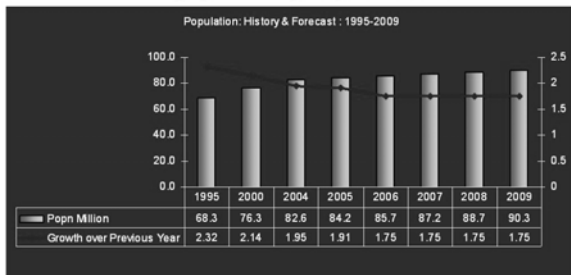
The official poverty incidence was 37.5% in 1997, but many estimate it may well be more than 40%.



Source: PSY 2003

7

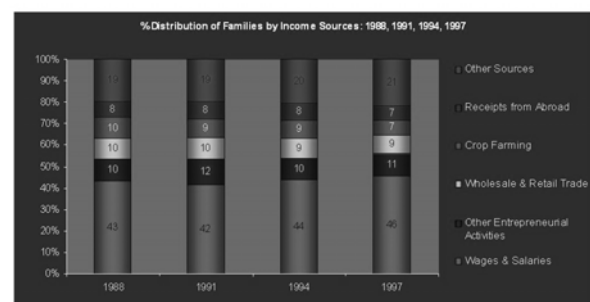
Philippine population



The population grew by 2% per year in the 1990s, taking total numbers to 82.6 million in 2004. Population is projected to reach 90.3 million in 2009.

5

Wages & Salaries still major source of income of about half of families.



Source: Philippine Health Care Factbook

8

While food is still the major expense item of families, health represents only 2% of family expenditure.

Percent Distribution of Family Expenditures on Health				
	1991	1994	1997	2000
Food	48.5	47.8	44.2	43.6
Housing	13.5	14.1	15.3	14.2
Education	3	3.7	3.7	4.2
Health	1.8	2.3	2.2	1.9
Tobacco	1.7	1.4	1.3	1.1
Alcohol	1	0.9	0.9	0.7
Others	30.5	29.8	32.4	34.3

Source: PSY 2003

9

Compared to the other countries in Asia, the Philippines lags behind in terms of per capita pharmaceutical consumption.

Education	3	3.7	3.7
Health	1.8	2.3	2.2
Tobacco	1.7	1.4	1.3
Alcohol	1	0.9	0.9
Others	30.5	29.8	32.4

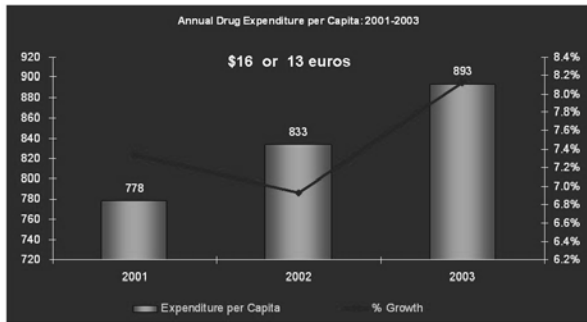
Per Capita Pharmaceutical Consumption by Country: 2001

Markets	Market Size (US\$ m)	Population (million)	Per Capita Consumption
South Korea	3,778	48	79
Taiwan	2,563	22	115
Philippines	1,082	79	14

Source: IMS

12

An average Filipino spend P900 a year for medicines.



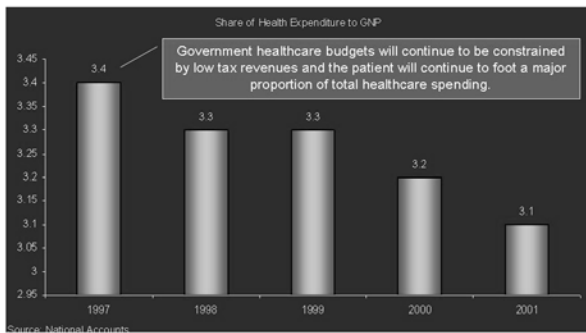
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Economic growth slowed to 3.8% in 2003 as exports failed to maintain buoyancy. Private consumption, due to lower inflation & increased remittances from abroad, grew by 5%.



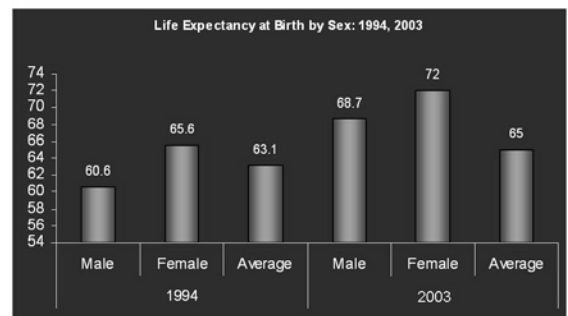
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National expenditure on healthcare remains below the WHO-recommended minimum of 5%.



11

Life expectancy at birth improved from 1994 to 2003.



Source: Philippine Health Care Factbook

14

Diseases of the Heart & the Vascular System are the top causes of mortality.

Cause	Total #	Rate	% of Total Deaths
1. Diseases of the heart	55,830	76.3	15.8
2. Diseases of the vascular system	41,380	56.6	11.7
3. Pneumonia	33,709	46.1	9.5
4. Malignant Neoplasm	32,090	43.9	9.1
5. Accidents	29,874	40.8	8.5
6. TB, all forms	28,041	38.3	7.9
7. COPD	14,228	19.5	4.0
8. Diabetes Mellitus	8,819	12.1	2.5
9. Other diseases of the respi system	7,516	10.3	2.1
10. Nephritis, nephritic syndrome, nephrosis	7,453	10.2	2.1

Number, Rate/100,000 Population & Percentage

Source: Field Health Service Information System

15

Riskfactors	1998 (%)	2003 (%)
Current smoker Male	53.9	56.3
Female	12.6	12.1
Hypertension	17.2	17.4
Diabetes mellitus FBS (>125 mg/dL)	3.9	3.4
History of diabetes	4.0	4.6
High total chol >200mg/dL	15.9	28.0
>240 mg/dL	4.0	8.5
High LDL >130 mg/dL	23.8	31.5
>160 mg/dL	8.1	11.7
Low HDL	65.4	54.2
Obesity (BMI >25)	20.2	23.9

Dans A, Morales D, et al. National Nutrition and Health Survey (NNHS): Atherosclerosis-related disease and risk factors. *Phil J Int Med* 2005;43:

18

Hypertension and other diseases of the heart belong to the leading causes of morbidity.

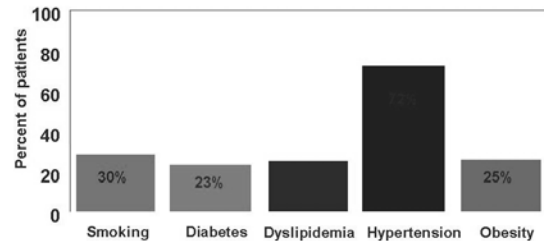
CAUSE	NO.	RATE
1. Diarrheas	845,526	1085
2. Bronchitis/Bronchiolitis	694,836	891.7
3. Pneumonias	652,585	837.4
4. Influenza	499,887	641.5
5. Hypertension	318,521	408.7
6. TB Respiratory	110,841	142.2
7. Diseases of the Heart	47,040	60.4
8. Malaria	40,543	52
9. Measles	24,494	31.4
10. Chickenpox	24,359	31.3

No. & Rate/100,000 Population

Source: Field Health Service Information System

16

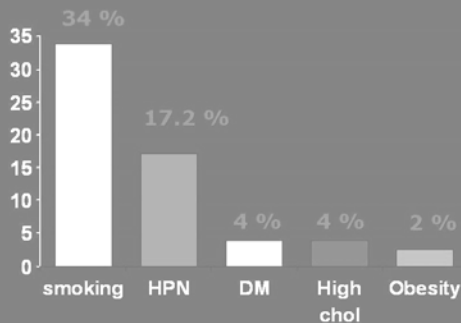
Frequency of risk factors among patients hospitalized for MI/UAP Philippines



ASPAC 1998

19

Prevalence of risk factors



PNHS 1998

17

Summary

- Cardiovascular disease is the leading cause of death in the Philippines
- CVD is among the top leading cause of disability
- Smoking, Low HDL cholesterol, Hypertension, and high LDL cholesterol are the prevalent risk factors for CVD

20

Research Priorities for Health Sector 2004

- Assessment of allocation and utilization of health budget at the LGU level
- Assessment of community-based healthcare financing mechanisms
- Feasibility studies on health reinsurance
- Functionality, replicability and sustainability of inter-local health zones
- Impact assessment of continuous quality improvement (CQI) mechanisms in hospitals

21

Research Priorities for Health Sector 2004

- Cost effectiveness of networking activities among hospitals
- Assessment of healthcare waste characterization and management practices
- Impact of clinical practice guidelines (CPGs)
- Burden of disease and quality of life studies on accidents, injuries and disabilities

22

PHA Research Priorities

- Burden of illness and quality of life studies on cardiovascular diseases
- Quality of care
- Economic analysis
- Clinical Practice Guidelines

23

WORKSHOP 1

Identifying & Prioritizing CV Research in the Asia Pacific

“What are the topics or areas of research that you think may be done in CVD in the Asia Pacific region?”

Objectives:

1. To identify topics in CV research
2. To evaluate and rate research topics using criteria of:
 - a. Relevance
 - b. Avoidance of duplication
 - c. Feasibility
 - d. Political acceptability
 - e. Applicability
 - f. Urgency
 - g. Ethical acceptability
3. To come up with a set of research priorities for the Asia Pacific region

It is evident that a country may be strong or weak in some areas as shown in the country reports. There are countries that have passed the “epidemiologic transition” from infectious diseases to chronic diseases. Some countries still have not experienced this transition thus infection is still the leading cause of death. There are countries which are confronted with both infectious diseases as well as chronic diseases.

This exercise was aimed to encourage collaboration in a community of doctors dealing with CVD in order to translate research into better patient care and address the gaps in knowledge.

Participants were requested to write down topics or areas for research, which they think, may be done for CVD in the Asia Pacific region.

Topics were then categorized under risk factors, epidemiology, burden of CVD, social marketing, collaboration, registry, guidelines, clinical studies, CHD, advocacy, genomics, and organization structure. Topics under each category are listed below including a summary of the discussions that followed.

1. Risk factors for CVD

- *Cardiovascular risk factor survey*
- *Cardiometabolic Study (Epidemiology, Obesity, DM & related diseases, Dyslipidemia)*
- *Hypertension & related disease*
- *ASEAN Country's “Poor Man's Diet” & Cardiovascular Diseases*
- *Tobacco-use among ASEAN countries*
- *Risk factors for CHD in the region*
- *Diabetes as CVD*
- *Correlation of CVD & risk factors with income, social status, and level of education*
- *Effective methods of lifestyle modification of control of CVD*

- *Survey on cardiologists'/MD's approach to risk factors modification*
- *Survey among cardiologists with regards to adherence to risk factor modification in Southeast Asian countries: % of smoking, % of dyslipidemia, % of obesity, % of DM, % sedentary lifestyle*
- *Relatives of patients with CVD need to be examined and advised*
- *Major coronary risk factors: epidemiologic studies in the region*

Summary of Discussion

- *Guide questions to ask for the topic : Survey on cardiologists'/MD's approach to risk factors modification:*
 - *Does he follow guidelines?*
 - *Does he counsel?*
 - *How does he feel about diet counseling?*
 - *Does he practice risk factor modification himself?*
- *Commonalities as depicted by the topics show that there is interest in the prevalence of CVD and risk factors that lead to CVD.*
- *There is a need to conduct a:*
 - *National survey of CVD to aid the government on policies and steps to undertake in the prevention and treatment of CVD; and*
 - *Survey of hospitalized patients.*
- *A uniform method of data collection is essential*
 - *Methods of collection that have been successful and significant in one country may be applied to other countries.*
 - *The protocol must be reviewed and validated to see if any concerns need to be improved.*
- *Prevalence data from each country may be synthesized to come up with information for the Asia Pacific region.*
- *A more wholistic approach in the implementation of health programs was suggested. "We cannot wait for government policies to be implemented from the top."*

2. Epidemiology

- *Epidemiologic study for CVD in the Asia Pacific region involving every country of the region*
- *APSC synchronization of epidemiologic data (Asia Pacific region)*
- *Application/implementation of data acquisition/epidemiologic survey among countries to get actual updated data: top ten mortality/morbidity, top ten cause of cardiac mortality/morbidity*
- *Consolidation of prevalence studies/surveys from different member countries*
- *Community-based surveys of CVD in countries where such surveys are lacking*
- *Assessment of CV data available worldwide & in our region*
- *Atherosclerosis burden (data from each country)*

Summary of Discussion

- *Nepal is very interested to conduct community-based surveys since no data is available in their country.*
- *Comparison or difference of CV data between Europe and the US with the Asia Pacific region may be initiated.*

3. Burden of CVD

- *Epidemiologic study for the CVD in Asia Pacific region involving every country of the region*
- *Burden of CV Diseases: National scope, Random sampling, Uniform protocol*
- *Burden of Illness of Metabolic Syndrome*
- *Burden of Disease (Daly's)*
- *Assessment of CV data available worldwide & in our region*

Summary of Discussion

- Collect all health data from different regions. Assessment of the available data must be done to avoid duplication of data.
- Assess available data and if implementation as far as the knowledge acquired is needed, then implementation procedures must follow.
- Most countries lack data on the prevalence of disease as well as risk factors of CVD thus a national survey must be conducted.
- The quality of data submitted by one country to the World Health Organization is different from the other. Data from one country is not completely comparable to other countries because of the different methods used to acquire data. Analysis and interpretation of data is different. Limitations must be recognized.
- WHO has a stepwise approach to the surveillance of risk factors and it is being used worldwide. This protocol may be used to have a more homogenous and comparable data.

4. Social Marketing

Summary of Discussion

- Different methods to stop smoking have been implemented but still many have not refrained from it despite the numerous warnings, programs and policies.
- There is a need for more advocacies for good health.
- We can learn from social marketing.
 - Campaigns and ads must hit the heart.
 - “Learn from industry what we don’t do well.”
- Intersectoral collaboration is vital. Healthcare workers need to partner with media and other sectors.

5. Collaboration

- *Area distribution of cardiovascular care (Availability of CVS care)*
- *Exchange & collaboration of efforts to understand each other*
- *Identification of strengths of each APSC member society in terms of research capabilities/possible sharing of research implementation*
- *Formation of subgroups having identical problems in the regions: a) SAARC b) others*

Summary of Discussion

- Countries must help each other.
- There is a need to exchange ideas so as to learn from each other. To do this, a strong infrastructure must be set up. This will give countries

the chance to collaborate and share ideas with each other. A socialized membership fee according to the socio-economic status of a country must be applied.

- New studies may encourage member countries to work together.
- APSC could start with obtaining data from each country and posting them in the website to make information readily available.

6. Clinical Studies

- *Thalassaemia major & iron-overload cardiomyopathy*
- *Diagnostic evaluation to modulate chelation therapy*
- *Cost effectiveness of lipid lowering therapy: a) high dose therapy, b) early dosing post MI, c) low-risk groups*
- *Delivery of anti-coagulation treatment & services in the region*

Summary of Discussion

- Consolidate and identify all researches and projects and disseminate information to the member countries. The need for an updated and properly maintained website has been stressed.
- Setup of telecommunications capability must be also a priority to make dissemination of information more effective.

7. Congenital Heart Disease (CHD)

- *Congenital Heart Disease & other HD in children*
- *Infectious diseases in relation to CHD*

8. Registry

- *Heart failure Registry*
- *Registry on CV procedures*
- *Registry of Atherosclerotic CV diseases: CAD, Cerebrovascular disease, and PVD*

Summary of Discussion

- Disease registries are difficult to develop and maintain.
- Quality is an issue also.

9. Guidelines

- *Appropriateness of guidelines in each country*
- *Guidelines of CAD treatment in the Asia Pacific Region*
- *Guidelines formation for the region and individual countries*
- *Impact of guidelines (local and international guidelines in cardiology practice in the region)*
- *Comparison/coordination of well-researched guidelines in CVD from member countries*
- *Strategies to implement risk factors modification through healthcare policies (e.g. tobacco smoking, education, control of awareness of food contents e.g. in public fast foods)*

Summary of Discussion

- There are two recognized guidelines from Europe and the US. As a starting point, guidelines from member countries may be pooled together to come up with a single and comprehensive guideline for the

Asia Pacific region. Conditions in the region are different from European and American settings.

- Equity focus for the formation of guidelines is essential to address cost effective treatment.
- There is a need to integrate guidelines from other countries in the region thus fostering inter-country collaboration.
- There is also a need for clinical health policies as well as government health policies,

10. Advocacy

- *Ways to stimulate government support for healthcare*
- *Environmental health to eradicate & prevent certain diseases*

Summary of Discussion

- How do we make the government support research?
- In the case of Nepal, there is no existing community data on CVD thus government prioritizes research and support to other sectors.
- There must also be advocacies not only for smoking but for good health

11. Genomics

Summary of Discussion

- Genomics research has led to the identification of disease-related genes and subsequent development of new genetic tests.

12. APSC Structure and Funding

- *Administration & infrastructure of APSC to make our goals achievable*
- *Getting research fund in rehabilitation & preventive medicine (in CVD)*
- *Fund for research activities*

Summary of Discussion

- A socialized membership fee according to the socio-economic status of a country must be applied.
- With regards to funding, countries may need boosting of their capabilities for cardiovascular training and research.
- Concern for human resources was raised and thus needs to be discussed by the APSC since there are a low number of cardiologists.

Though, not listed as a priority, extensive discussions on tobacco took place.

13. Tobacco cessation

Summary of Discussion

- Implementation of strategies on how to stop smoking is different from one country to the other.
- Isolate what strategies work and what don't work with what particular population.
- It is not a hit-all strategy which will be applied for anybody or everybody, anytime and anywhere.

- Identify approaches that have been found to be successful in curbing smoking from each country. Apply them to other countries and APSC may develop research from these.
- Persistence of healthcare providers to educate, persuade and influence patients to stop smoking is an important task.

Arriving at a Consensus

After deliberations, the 13 topics were further re-classified into nine (9) major topics. Topics on collaboration, APSC structure and funding were separately classified under organizational issues.

Certain topics have cross cut several issues and were categorized under one topic. Studies pertaining to Epidemiology and Burden of CVD were set under Epidemiology of CVD. On the other hand, Clinical Studies and Congenital Heart Disease were further classified under Clinical Trials and Studies. Tobacco Control Strategies and Knowledge Translation, though not specifically listed as categories, came up as major topics during deliberations.

Topics Raised	Final Topics
Tobacco Cessation	Tobacco Control Strategies
Clinical Studies	Clinical Trials/Studies
Congenital Heart Disease	
Disease Registries	Disease Registries
Guidelines	Guidelines/Policies
Advocacy	Advocacy/ Social Marketing
Social Marketing	
Epidemiology	Epidemiology of CVD
Burden of CVD	
Risk Factors of CVD	Risk Factors of CVD
Genomics	Genomics
	Knowledge Translation

A rating sheet (Table 1) was given out to each participant to evaluate each of the nine topics based on the criteria provided (Table 2). All participants' total score per topic was added up and averaged to get the topic rating and corresponding rank

Table 1 Rating Sheet

Criteria	T O P I C								
	1	2	3	4	5	6	7	8	9
Relevance									
Avoidance of duplication									
Feasibility									
Political acceptability									
Applicability									
Urgency									
Ethical acceptability									

Table 2 Criteria

Rating	Relevance	Avoidance of duplication	Feasibility	Political acceptability	Applicability	Urgency	Ethical acceptability
1	Not relevant	Sufficient information already available	Study not feasible considering available resources	Topic not acceptable to high level policy-makers	No chance of recommendations being implemented	Information not urgently needed	Major ethical problems
2	Relevant	Some information available but major issues not covered	Study feasible considering available resources	Topic more or less acceptable	Some chance recommendations being implemented	Information could be used right away but a delay of some months would be acceptable	Minor ethical problems
3	Very relevant	No sound information available on which to base problem-solving	Study very feasible considering available resources	Topic fully acceptable	Good chance recommendations being implemented	Data very urgently needed for decision-making	No ethical problems

Based on the results, the priorities in order of rank are:

RANK	TOPICS	SCORE
1	TOPIC 1 Tobacco Control Strategies	19.19
2	TOPIC 6 Epidemiology of CVD	17.04
3	TOPIC 7 Risk Factors of CVD	16.81
4	TOPIC 3 Disease Registries	15.85
5	TOPIC 4 Guidelines/Policies	15.77
6	TOPIC 2 Clinical Trial Studies	15.31
7	TOPIC 5 Advocacy/Social Marketing	15.00
8	TOPIC 8 Knowledge Translation	12.96
9	TOPIC 9 Genomics	10.38

Promoting Collaboration & Partnerships: Team and Coalition Building

Nina T. Castillo-Carandang, MA, MSc

“APSC is at the crossroads of health and equity. One of the ways to go forward is to promote collaboration and partnerships.”

Key points:

- A partnership is an agreement between individuals or groups working together to achieve a common goal
- Acting and deciding together will lead to partnership (Wilcox)
- Everyone must bring in something of value to the partnership.
- Successful partnerships are based on:
 - Necessity
 - Respect
 - Effective leadership
 - Trust and Commitment (takes time)
 - Transparency
 - Good communications
 - Effective organizational management
 - Common goals and aims
 - Collaborative decision-making
- Partnerships fail because of:
 - Lack of communication
 - Unequal balance and control
 - Hidden agenda
 - Lack of purpose or vision
 - Being too costly to engage in the partnership
- Partnership allows individual creativity
- Partnerships may be formed by setting up a forum, appointing organization representatives, forming a steering group, running a “planning for real “ exercise (what may be done in a real world scenario)
- Consider whom you really need as partners and whom you can work with.
- Clarification of aims and objectives (e.g. What does APSC aim to do as an organization?), identifying stakeholders, and getting support and agreement among the organization to work with others are some guidelines to consider in making a partnership work. Communication and involvement as well as honesty and openness are vital to a partnership.
- Make resources available to the partnership. Not all individuals in the partnership have the same level of capacity as everyone else thus training must be provided to them.
- “Carry and hold the hand” of someone who is lagging behind. Mentoring and nurturing them develops confidence and helps to keep the partnership in synch with achieving its goals.
- Soliciting outside help from experts may also be helpful especially in financial and administrative procedures.
- Identify expected output and document them so as these may be shared to others.
- Definition of a team: “People, both as individuals and as organizations, working together for a shared purpose or goal.”
- Concepts of a team:

- Specific functions:
 1. Task related functions. Teams must identify their goals and identify their expected outputs and plans. Assessment of the team's progress is also an important task and should be done regularly.
 2. People related functions. This includes ensuring members are clear of their roles. Appreciating their contributions and providing feedback about their performance is important.
- Dynamic entity:
 1. A team is a unit that goes through orientation; trust building, goal/role definition and commitment (creating stage). It then moves on to planning, implementing and re-assessing its goals and outputs (sustaining stage).
- A team may work even when geographically dispersed. Geography is no longer a barrier to teamwork. Teams can communicate and function "any time, any place".
- Digital workspace refers to the facilities of the internet to communicate, collaborate and share information with individuals regardless of their geographic location to accomplish tasks. It is a work environment that enables exchange of information virtually.

Promoting Collaboration & Partnerships

Team and Coalition Building

Nina T. Castillo-Carasang

1

What's a partnership?
(Wilcox 2000)

- "Partnership, like community, is a much abused term.
- I think it is useful when a number of different interests willingly come together formally or informally to achieve some common purpose.
- ***The partners don't have to be equal in skills, funds or even confidence, but they do have to trust each other and share some commitment.***
- In participation processes - as in our personal and social lives - building trust and commitment takes time."

Nina T. Castillo-Carasang
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3

Creating Partnerships

Introduction

Nina T. Castillo-Carasang

2

What's a partnership?

- An agreement between two or more partners to work together to achieve common aims.

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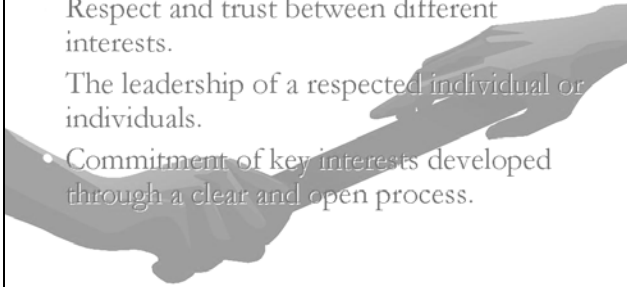
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Successful partnership (1)

Agreement that a partnership is necessary.
Respect and trust between different interests.

The leadership of a respected individual or individuals.

- Commitment of key interests developed through a clear and open process.



5

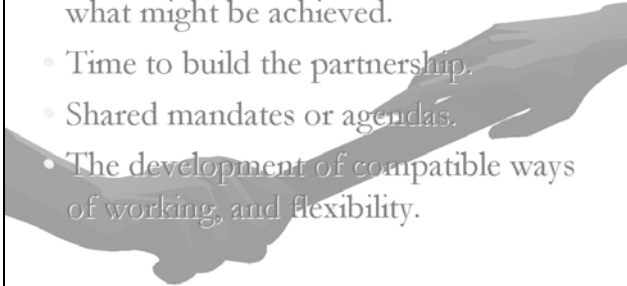
Characteristics Of Failed Attempts At Partnership



8

Successful partnership (2)

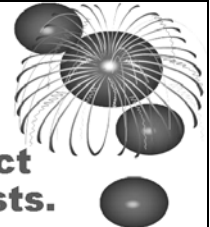
- The development of a shared vision of what might be achieved.
- Time to build the partnership.
- Shared mandates or agendas.
- The development of compatible ways of working, and flexibility.



6

Something's Wrong (1)

- **A history of conflict among key interests.**
- **One partner manipulates or dominates.**
- **Lack of clear purpose.**
- **Unrealistic goals.**



9

Successful partnership (3)

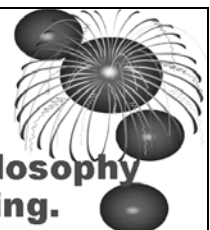
- Good communication, perhaps aided by a facilitator.
- Collaborative decision-making, with a commitment to achieving consensus.
- Effective organizational management.



7

Something's Wrong (2)

- **Differences of philosophy and ways of working.**
- **Lack of communication.**
- **Unequal and unacceptable balance of power and control.**



10

Something's Wrong (3)



- **Key interests missing from the partnership.**
- **Hidden agendas.**
- **Financial and time commitments outweigh the potential benefits.**

11

5 Stances (Wilcox 2000)

- The key issue is what '**stance**' you take if you are an organisation initiating or managing a process of participation or partnership building.

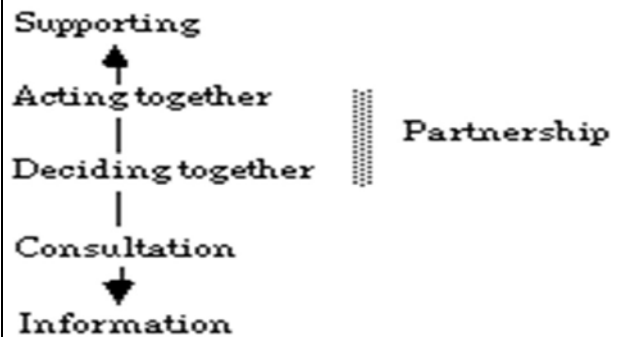
14

Participation and partnership



12

5 levels or stances which offer increasing degrees of control to the others involved (Wilcox 2000)



15

Five stances

Wilcox 2000

13

5 levels or stances which offer increasing degrees of control to the others involved (Wilcox 2000)

1. Information

- The least you can do is tell people what is planned.

2. Consultation

- You identify the problems, offer a number of options, and listen to the feedback you get.

16

5 levels or stances which offer increasing degrees of control to the others involved (Wilcox 2000)

Deciding together

You encourage others to provide some additional ideas and options, and join in deciding the best way forward.

Acting together

Different interests decide together what is best and form a partnership to carry it out.

17

Different forms of partnership

20

5 levels or stances which offer increasing degrees of control to the others involved (Wilcox 2000)

Supporting independent initiatives

- You help others do what they want perhaps within a framework of grants, advice and support provided by the resource holder.

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Different forms of partnership

- 1. Set up a forum**
- 2. Create special interest fora**
- 3. Appoint organization representatives**
- 4. Form a steering group of all interests**
- 5. Run a *Planning for Real* exercise**

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21

5 levels or stances which offer increasing degrees of control to the others involved (Wilcox 2000)

- The 'lower' levels of participation keep control with the initiator but they lead to less commitment from others.
- **Partnership** operates at the levels of **Deciding Together** and **Acting Together**.
- Information is essential for all participation but is not participatory in itself.

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Guidelines for partnership

22

Get the money first, worry about partnership later?? (1)

- Dress up funding bids with token representation,
 - then bring people on board when the money is there.
- This may be convenient for the bidding body.....*However,.....*

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Guidelines for partnership

Some guidelines which provide a way of deciding:

1. What sort of partnership you may wish to create, and
2. How to make a start

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Get the money first, worry about partnership later?? (2)

- Will it then be possible to gain the commitment of other partners whose support, skills and funds may be needed?
- Will local groups challenge rather than support plans which have been developed without them?

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Guidelines for partnership

■ **Clarify your own aims and objectives in forming a partnership.**

- What are you trying to achieve, and how will you explain that?

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Get the money first, worry about partnership later?? (3)

- Will the funder see through the ploy?
- Will plans be flexible enough to respond to local needs and demands?

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Guidelines for partnership

■ **Identify the stakeholders**

- Key interest groups who can help or hinder the project or programme and put yourself in their shoes.
- Who holds the power?

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Guidelines for partnership

- **Consider**
 - **who you really need as partners, and**
 - **who would really want to be a partner.**
 - Some stakeholders may simply want to be consulted.

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Guidelines for partnership

- **Communicate with your partners in language they will understand**
 - **Focus on what they may want to achieve.**

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Guidelines for partnership

- **Before approaching potential partners:**
 - **Make sure you have support and agreement within your own organisation about working with others.**

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Guidelines for partnership

- **Plan the partnership process over time.**
 - For example, a new organisation may well take a year to set up.

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Guidelines for partnership

- **Make informal contact with partners to find out about their attitudes and interests before putting formal proposals.**

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Guidelines for partnership

- **Use a range of methods to involve people workshop sessions as well as formal meetings.**
 - ***Be sociable!***

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Guidelines for partnership

- **Encourage ideas from your partners.**
 - Ownership leads to commitment.
- **Be open and honest.**

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Strategies for Partnerships and Participation

Getting started (2)

- ◆ Map local organisations;
- ◆ Understand local priorities and skills;
- ◆ Build confidence through early project work;
- ◆ Develop a vision and action plans with local organizations.

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Strategies for Partnerships and Participation

Modified from:
Joseph Rowntree Foundation and the UK
Government's Department for Transport
and the Regions (1999)

36

Strategies for Partnerships and Participation

Involving organizations in partnerships

- ◆ Create partnership structures that work for local organizations;
- ◆ Make resources available for groups;
- ◆ Arrange training for members;
- ◆ Help organizations with administrative and financial procedures.

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Strategies for Partnerships and Participation

Getting started (1)

- ◆ Involving organizations in partnerships
- ◆ Creating strong local organisations with their own assets
- ◆ Developing an infrastructure to build and sustain national/regional organisations
- ◆ Monitoring progress

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Strategies for Partnerships and Participation

Creating strong local organisations with their own assets


- ◆ Develop a partnership 'forward strategy', including a strong role for local groups;
- ◆ Consider possible models for successor organisations

40

Strategies for Partnerships and Participation

Developing an infrastructure to build and sustain organisations

- Accept that organisations may need long-term support;
- Contribute to the better co-ordination of training and support services;
- Take steps to secure pre-bid resources for groups.



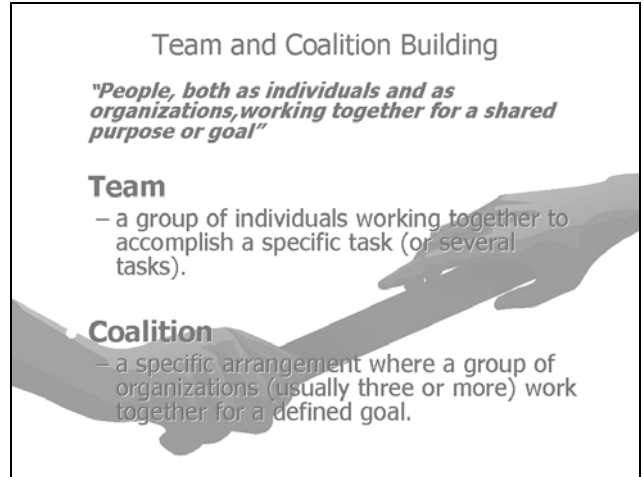
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Team and Coalition Building

"People, both as individuals and as organizations, working together for a shared purpose or goal"

Team
 – a group of individuals working together to accomplish a specific task (or several tasks).

Coalition
 – a specific arrangement where a group of organizations (usually three or more) work together for a defined goal.



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Strategies for Partnerships and Participation

Monitoring progress

- Establish a framework for evaluating both concrete outputs and key processes in community involvement;
- Ensure appropriate monitoring of progress by the partnership



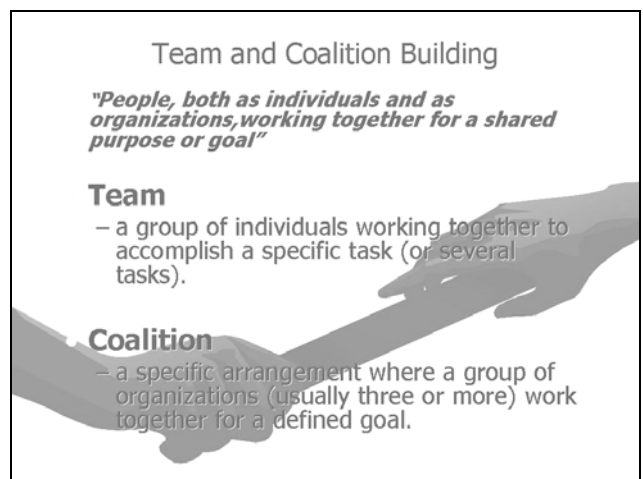
42

Team and Coalition Building

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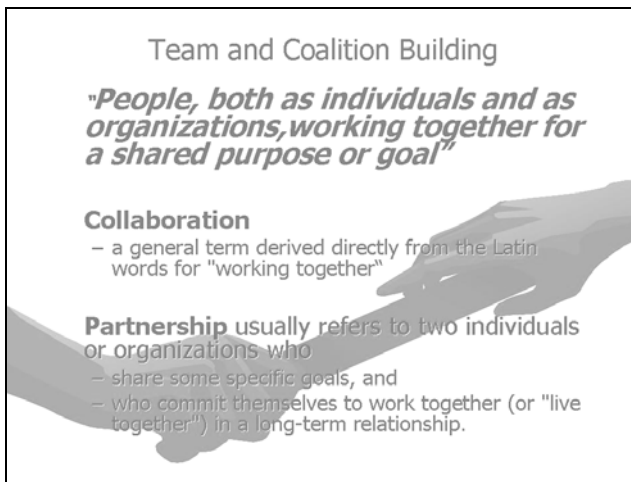
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Team and Coalition Building

"People, both as individuals and as organizations, working together for a shared purpose or goal"

Collaboration
 – a general term derived directly from the Latin words for "working together"

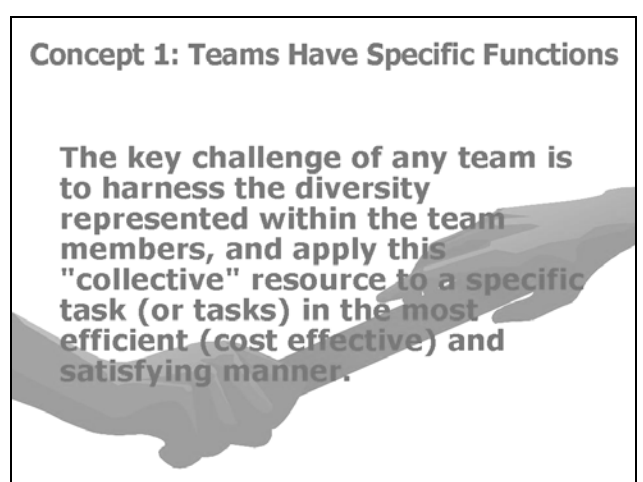
Partnership usually refers to two individuals or organizations who
 – share some specific goals, and
 – who commit themselves to work together (or "live together") in a long-term relationship.



43

Concept 1: Teams Have Specific Functions

The key challenge of any team is to harness the diversity represented within the team members, and apply this "collective" resource to a specific task (or tasks) in the most efficient (cost effective) and satisfying manner.



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Concept 1: Teams Have Specific Functions

1. Task-related Functions

- clarifying the objectives of the team (committee, working group, etc.);
- identifying the expected outputs ("products");
- preparing a specific team plan (who will do what by when);
- establishing "ground rules" of team functioning; and
- regularly assessing progress, in relation to a pre-determined plan.




47

Concept 2: Teams are Dynamic Entities (1)

The team itself becomes a social entity – a type of "unit". Its development and on-going activity can be viewed as a cycle – almost like the life cycle of an organism, going through specific stages.

Creating stages:

1. Orientation: Why am I here?
2. Trust Building: Who are you?
3. Goal and Role definition: What are we doing?
4. Commitment: How will we do it?



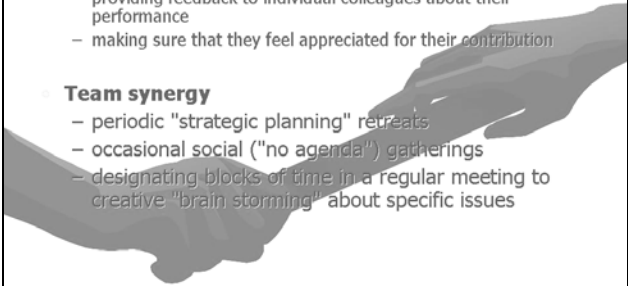
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2. People-related Functions

- ensuring that individual team members are clear about their distinctive roles
- providing feedback to individual colleagues about their performance
- making sure that they feel appreciated for their contribution

Team synergy

- periodic "strategic planning" retreats
- occasional social ("no agenda") gatherings
- designating blocks of time in a regular meeting to creative "brain storming" about specific issues

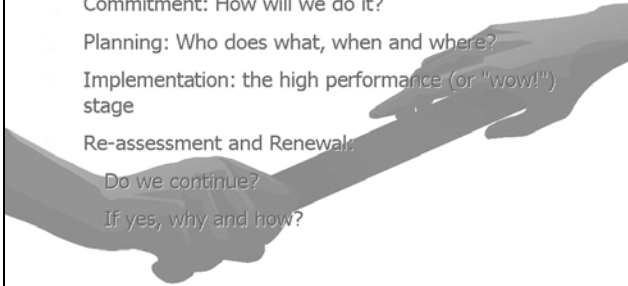


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Concept 2: Teams are Dynamic Entities (2)

Sustaining stages:

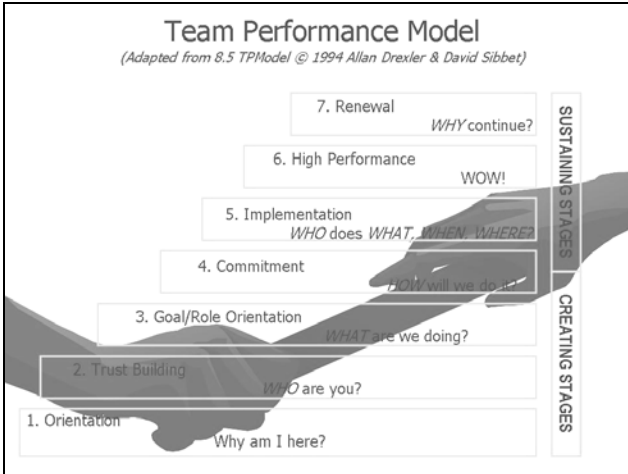
- Commitment: How will we do it?
- Planning: Who does what, when and where?
- Implementation: the high performance (or "wow!") stage
- Re-assessment and Renewal:
 - Do we continue?
 - If yes, why and how?



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Qualities of a High-Performing Work Team	Obstacles to Effective Teamwork
mutual respect and cooperation	lack of respect; conflict among team members
clear and positive communication	misunderstanding and lack of Communication
regular feedback about performance	inconsistent feedback
feeling of appreciation for contribution	feeling ignored, unappreciated and unsupported for efforts
clarity of structure and goals	management confusion about team objectives

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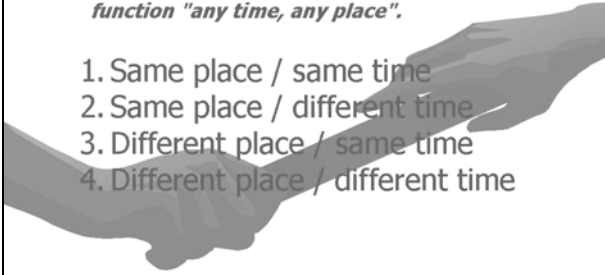


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Concept 3: Geographically Dispersed Teams Can Work

Geography is no longer a barrier to teamwork. Teams can communicate and function "any time, any place".

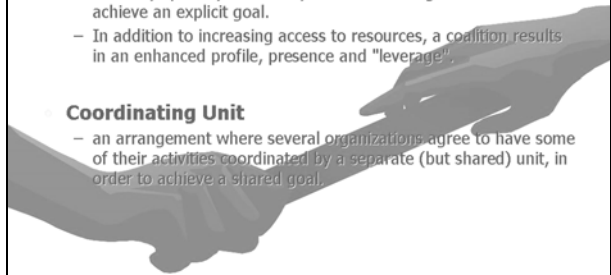
1. Same place / same time
2. Same place / different time
3. Different place / same time
4. Different place / different time



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Coalitions and Coalition Building (2)

- **Coalition**
 - an entity specially created by two or more organizations to achieve an explicit goal.
 - In addition to increasing access to resources, a coalition results in an enhanced profile, presence and "leverage".
- **Coordinating Unit**
 - an arrangement where several organizations agree to have some of their activities coordinated by a separate (but shared) unit, in order to achieve a shared goal.



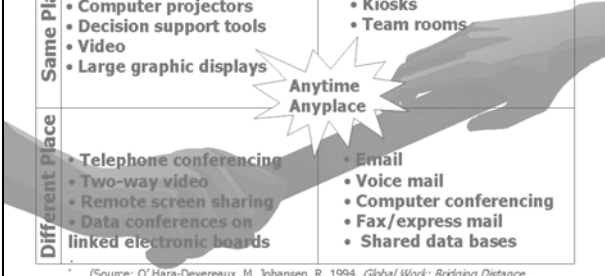
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The 4-Square Map of Groupware Options

	Same Time	Different Time
Same Place	<ul style="list-style-type: none"> • White boards • Flip charts • Computer projectors • Decision support tools • Video • Large graphic displays 	<ul style="list-style-type: none"> • Workstations • Bulletin boards • Kiosks • Team rooms
Different Place	<ul style="list-style-type: none"> • Telephone conferencing • Two-way video • Remote screen sharing • Data conferences on linked electronic boards 	<ul style="list-style-type: none"> • Email • Voice mail • Computer conferencing • Fax/express mail • Shared data bases

Anytime Anyplace

(Source: O'Hara-Devereaux, M., Johansen, R. 1994. *Global Work: Bridging Distance, Culture and Time*. San Francisco: Jossey-Bass Publishers.)



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Research and Learning Coalitions

Health researchers have become increasingly concerned about the gap between the producers" and "users" of research.

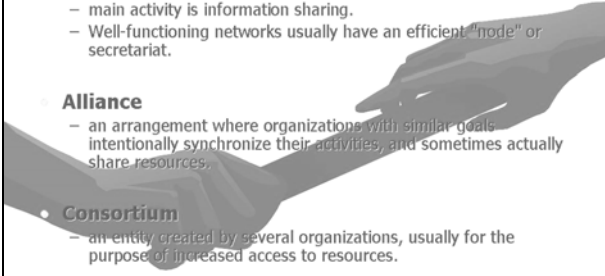
- **Focus**
- **Inclusiveness**
- **Team work**
- **Appropriate communications**
- **Intentional learning**
- **Leadership and facilitation**



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Coalitions and Coalition Building (1)

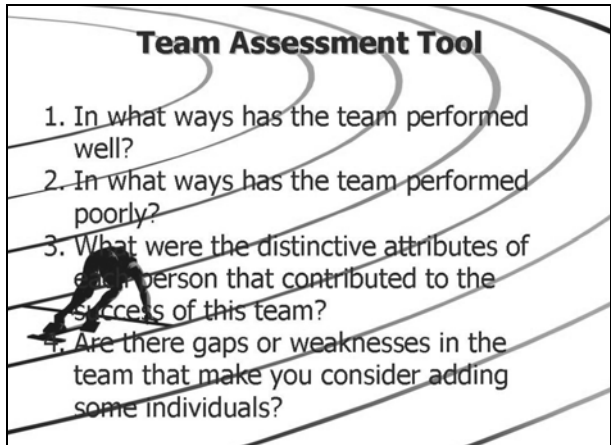
- **Network**
 - an arrangement where several organizations or institutions share a common interest
 - main activity is information sharing.
 - Well-functioning networks usually have an efficient "node" or secretariat.
- **Alliance**
 - an arrangement where organizations with similar goals intentionally synchronize their activities, and sometimes actually share resources.
- **Consortium**
 - an entity created by several organizations, usually for the purpose of increased access to resources.



55

Team Assessment Tool

1. In what ways has the team performed well?
2. In what ways has the team performed poorly?
3. What were the distinctive attributes of each person that contributed to the success of this team?
4. Are there gaps or weaknesses in the team that make you consider adding some individuals?



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Team Assessment Tool

5. Assuming that you are the leader of your team, who do you think will, or should, succeed you?

- Have you specifically prepared your successor(s)?

6. Are younger associates (as "emerging leaders") deliberately and systematically included in the leadership team?

- Do you have a program or plan to help them develop as leaders?

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Tool to Assess Readiness for Intersectoral Action . . . continuation

•Relationship

- Has the nature of the relationship between the sectors/organizations involved been negotiated?
- Is there a high level of trust and respect between the organizations?

•Planned Actions

- Do the people involved directly in the planned action recognize the need to work together?
- Is there an agreed way of working?

62

Tool to Assess Readiness for Intersectoral Action (1)

• Necessity

- Is the planned action important to achieve organizational goals?
- Does it ensure/enhance organizational survival?

• Opportunity

- Are there adequate opportunities for the planned action to be undertaken and sustained by supportive environmental contexts?
- Are there clear "triggers" for action?

60

Tool to Assess Readiness for Intersectoral Action . . . continuation

Sustained Outcomes

- Are there ways of monitoring the outcomes of the action over time?
- Are the sectors aware that they may need to take ongoing action to sustain the outcomes?

63

Tool to Assess Readiness for Intersectoral Action (2)

• Capacity

- Have the health sector and the other participating organizations the capacity to undertake the action that is being planned?
- Is there a need to strengthen organizational support?
- Is there a need to identify resources for use in developing, negotiating, implementing, evaluating and sustaining the planned action?

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Digital Workspace

The term "digital workspace" is used to refer to a web-based work environment that allows individuals to communicate, collaborate and share information regardless of their geographic location.

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Digital Workspace

- Facilitates information sharing
- Supports planning and organizing of work
- Enables collaborative work

Getting Your Research Funded

Mary Ann Lansang, MD, MSc



“Research today is no longer an individual enterprise. You need partnerships to carry out significant research.”

Key points:

- Funding sources may come from small scale to large scale players. Small scale sources are those referred to as “cake sale sources” where individuals are invited to special events and they pay fees which may be used for research. Medium scale returns come from major gifts from philanthropic organizations. This is practiced in Western Europe and Northern America where billionaires give grants for research and for non-profit organizations. Large scale players include overseas development assistance and institutional grants (e.g. Philippine Council Health Research and Development - PCHRD). Estate or planned giving is the biggest player who can grant funding by endowments and annual grants.
- 80% of funding for clinical research comes from pharmaceutical companies.
- R&D divisions of these companies conduct real research and world class or GCP adherent trials.
- There is an increasing role for contract research organizations (CRO) who take over the portfolio mandated by the pharmaceutical industry and farm out the collection of patient data and analysis to particular researchers in different countries. It was suggested that APSC act as a more academic CRO to determine specific research that could be implemented.
- Non profit foundations of pharmaceutical companies do not dictate research agenda but one may apply for a grant. (Merck, Eli Lilly, Bristol-Myers, Roche) These foundations have independent decision making authority.
 - US National Institutes of Health is one of the biggest funding agencies for real and actual research (not development grants or aid assistance). It has a major interest in CVD diseases.
 - The Canadian Institutes of Health Research provides grants for respiratory and circulatory health. The InterHEART study spearheaded by Dr. Salim Yusuf was conducted in 52 countries where 9 risk factors were studied. This may be replicated in the Asia Pacific region and may be a spin off.
 - Philanthropic foundations
 - Corporate funding
 - Top US foundations that could be sources of grants include Bill and Melinda Gates Foundation where more than 1 billion grants have been awarded mostly for US education and developing countries. Vaccines for drug development, malaria, maternal, child, and reproductive health, TB, HIV-AIDS are given priority. A 3-page concept proposal must be submitted electronically. David and Lucile Packard Foundation and William and Fiona Hewlett Foundation also give grants to developing countries.

- Wellcome Trust awards research grants to developing countries but it is better to collaborate with developed countries.
- Infectious diseases have been receiving a lot of research grants but it is predicted that in the future non-communicable disease problems (CVD diseases, cancer, diabetes, respiratory and oral diseases) will be given priority
- The Disease Control Priorities Project (DCP2) has developed a book: “Investing in Global Health” where there are several chapters focusing in CVD. The book may be downloaded from www.dcp2.org
- Partnership with the Initiative for Cardiovascular Health Research in the Developing Countries (IC-Health) to conduct CVD researches and other initiatives may be considered. Its main objective is capacity building in low-resource settings. Major partners involved in IC-Health are World Health Organization and Global Forum for Health Research. (For more information, Dr. Srinath Reddy ksreddy@ccdcindia.org may be contacted)
- General Protocol writing tips:
 - Prepare a good research question
 - Develop a 3-page outline clearly reflecting the goals of a program announcement vis-à-vis your aims. (1st page must show specific aims, 2nd page may show a diagram with details of the project)
 - Get a good mentor to give advice on resources, support, ideas, etc. and the funding agency particulars.
 - Study the agency’s guidelines
 - Use diagrams, charts and figures to show timelines of progress
 - Propose less than you can do.
 - Use exquisite detail (particular of NIH)
 - Use simple language and not jargon.
- After the proposal has been written, re-read the proposal making sure all questions have been answered. Have someone not familiar with the study read it if it was understood.

Getting Research Funded

*Mary Ann D. Lansang, MD, MMedSc
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 College of Medicine
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Acknowledgments

Sources of some slides

- Dr Srinath Reddy, IC Health
 - Disease Control Priorities Project
 - Tina Heiler, INCLEN
- WITH MANY THANKS!**
-

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Overview of Funding Sources



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Possible sources of research support

- Wellcome Trust
- Spin-off's from DCP2
- Specialty professional societies: local and foreign
- Philippine Council for Health Research & Development
- National Research Council of the Philippines
- Research funds from your institution
- Corporate funds

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Possible sources of research support

- Clinical research: > 80% from pharmaceutical industry
 - real R&D
 - "me too" trials
 - role of contract research organizations
 - non-profit foundations of big pharma
- U.S. National Institutes of Health
- Canadian Institutes of Health Research: Institute of Circulatory and Respiratory Health
 - Dr Salim Yusuf: InterHEART study- 9 risk factors; 30,000 people; 52 countries
- Philanthropic foundations

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Future Focus of Health Funding Internationally

- Psychiatric Disease
 - Mental Illness
 - Mental Health
- Environmental Hazards:
 - Water supply
 - Food safety
 - Air pollution
- Injuries:
 - Intentional
 - unintentional
- Tobacco's Legacy
- Non-communicable Diseases:
 - Cardiovascular Disease,
 - Cancer
 - Diabetes
 - Respiratory Disease
 - Genetic Disorders
 - Oral Diseases

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Top 25 foundations in the USA by total giving, 2004

Top 50 Foundations by Total Giving, 2004

Foundation	State	Foundation Type ¹	Total Giving ²	Assets	Fiscal Year
1. Bill & Melinda Gates Foundation	WA	IN	\$1,255,742,763	\$28,798,403,289	12/31/2004
2. Ford Foundation	NY	IN	\$222,812,289	\$1,689,963,944	6/30/2004
3. Billie Jean King National Center for Women's Sports	NY	SP	\$20,998,429	0	12/31/2004
4. Bristol Myers Squibb Patient Assistance Foundation ³	NY	SP	\$16,628,912	1,886,756	12/31/2004
5. Life Extension	IN	IN	\$28,917,821	\$381,043,240	12/31/2004
6. Robert Wood Johnson Foundation	NJ	IN	\$28,286,279	\$991,084,232	12/31/2004
7. David and Lucile Packard Foundation	CA	IN	\$12,778,255	\$28,283,452	12/31/2004
8. Johnson City Patient Assistance Foundation ³	NY	SP	\$18,783,385	5,384,851	12/31/2004
9. William and Flora Hewlett Foundation	CA	IN	\$18,427,895	\$251,054,289	12/31/2004
10. Anonymous Foundation	IN	IN	\$15,682,628	\$2,621,251,251	6/30/2005
11. W. K. Kellogg Foundation	MI	IN	\$14,342,812	\$298,383,532	8/31/2005
12. Gordon and Betty Moore Foundation	CA	IN	\$25,986,149	\$142,534,857	12/31/2004
13. John D. and Catherine T. MacArthur Foundation	IL	IN	\$18,998,176	\$223,223,920	12/31/2004
14. Andrew W. Mellon Foundation	PA	IN	\$12,286,481	\$301,088,625	12/31/2004
15. Roche Patient Assistance Foundation ³	NY	SP	\$73,785,882	0	12/31/2004
16. Anne C. Casey Foundation	MD	IN	\$71,354,926	\$296,289,885	12/31/2004
17. Spear Foundation	NY	IN	\$18,287,273	\$346,589,536	12/31/2004
18. Helene Fuld Foundation	MD	CS	\$14,557,486	\$8,881,279	1/31/2005
19. California Endowment	CA	IN	\$13,242,789	\$28,571,524	3/31/2005
20. Life Care Foundation ³	IN	SP	\$16,781,789	1,377	12/31/2004
21. Novartis Foundation	NY	IN	\$13,282,789	\$227,383,825	12/31/2004
22. New York Community Trust	NY	CM	\$18,588,888	\$383,817,548	12/31/2004
23. Charles Stewart Mott Foundation	MI	IN	\$13,252,792	\$257,891,211	12/31/2004
24. Amgen Pharmaceuticals Health Care Foundation	NY	CS	\$14,688,984	0	12/31/2004
25. Reynolds Community Foundation	CA	CM	\$18,138,384	\$85,424,429	12/31/2004

From: Renz L et al. Foundation Growth and Giving Estimates, 2006

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DISEASE CONTROL
PRIORITIES PROJECT



Investing in Global Health "Best Buys" and Priorities for Action in Developing Countries

Fogarty International Center of the U.S. National Institutes of Health, the World Bank, the World Health Organization, and the Population Reference Bureau
2006

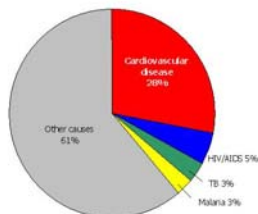
INVESTING IN GLOBAL HEALTH "BEST BUYS" AND PRIORITIES FOR ACTION IN DEVELOPING COUNTRIES

www.dcp2.org

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Cardiovascular disease is the leading cause of death in low- and middle-income countries.

Deaths in Low- and Middle-Income Countries by Selected Causes, 2001



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Sponsors of DCP2

- The Bill & Melinda Gates Foundation
 - The World Bank
 - Fogarty International Center/NIH
 - World Health Organization
- Dissemination & analyses/ implementation in LMICs expected. Interest from:
- Ministries of Health; S&T
 - Development agencies and World Bank
 - Multilateral agencies

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Some findings from "Global Burden of Disease and Risk Factors". 2006

www.dcp2.org

- [Contributions of risk factors to cardiovascular disease mortality and BOD](#)

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Building Research Capacity in Low-Resource Settings:

INITIATIVE FOR CARDIOVASCULAR HEALTH RESEARCH IN THE DEVELOPING COUNTRIES



IC-HEALTH

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Some recommendations from "Disease Control Priorities in Developing Countries". 2nd edition (DCP2)

- Promote the use of aspirin and other inexpensive drugs to treat and prevent heart attack and stroke. (<\$25 per DALY averted for AMI treatment; \$451-926 for secondary prevention)
- Substitute 2% of trans fat with polyunsaturated fat through regulation. (\$25-73 per DALY averted)
- Help smokers quit through higher cigarette prices (\$3-42 pDa) and cessation therapy (\$55-751 pDa).

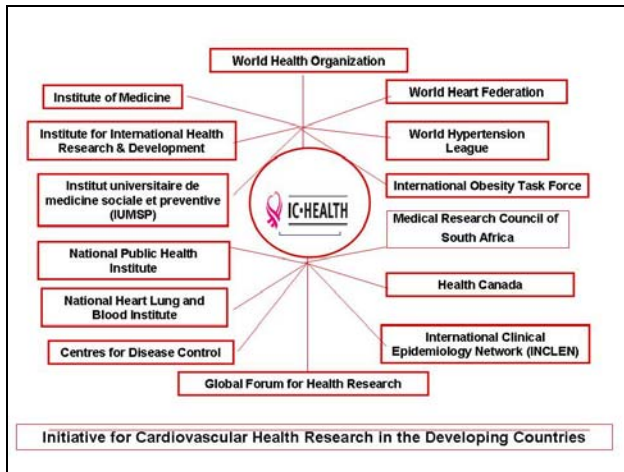
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Mission: Stimulate, strengthen and support research relevant to CVD prevention and control in developing countries

Portfolio: 6 projects

- Capacity Assessment
- Surveillance
- Community based primary prevention
- High BP detection & control
- Cost-effective interventions in high risk individuals
- Global Information Systems

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- **Methodology Workshops**
 - Assessment of National Capacity for CVD Prevention and Control (February 2000)
 - Surveillance of CVD Risk Factors (February 2000)
- **Priority Setting Workshops**
 - HBP Prevention & Control
 - CVD Risk Reduction Primary Health Care
 - Interventions for Tobacco Control
 - Nutritional interventions
 - Recognition & Management of ACS
 - Diabetes and CVD

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REORIENTATION

Renamed: IC Health in 2002

Mission: Operational research
Policy Research
Capacity Building

Focus: CVD risk reduction and prevention in primary health care settings

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- **Research Completed**
 - Capacity Assessment for CVD Prevention and Control (Cameroon, India and Thailand)
 - Macroeconomic effects of CVD in Developing countries

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- CURRENTLY FUNDING**
- Vascular Risk Reduction in Primary Health Care Settings = 5 PDGs; 4 SUGs
 - Tobacco Related Research = 11 PDGs; 6 SUGs
 - Nutrition-related Research = 6 PDGs
 - Macro-economics of CVD = 4 Country studies

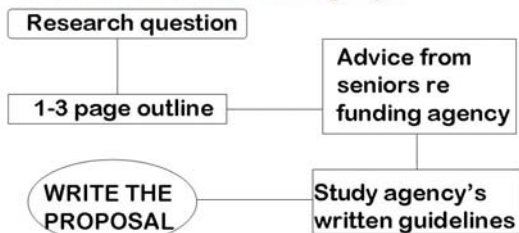
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Call for proposals issued in 2005

- **ACS Recognition and Management in Primary & Secondary Care:**
16 proposals received;
Undergoing review
- **Reducing CVD Risk in Diabetes:**
14 proposals received;
Undergoing review

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General Protocol Writing Tips



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LEVERAGING FUNDS

- ❑ Collaborative project funded by IC Health for SUG accepted for funding by the Wellcome Trust (USD 633412)
- ❑ Project developed by the Scientific Secretariat of IC Health and another from Cameroon funded by IC Health for SUG under review for funding by Oxford Health Alliance
- ❑ World Bank grant of USD 500,000 received for Macroeconomics project developed by IC Health
- ❑ INCLIN funding a PDG funded by IC Health and now under review for SUG based in Argentina

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General Protocol Writing Tips--1

Isaac Kohane (Jan 2006)--\$45M for 15 grants

- ❑ Make sure you have a real mentor. Begin to talk with your mentor about 10 weeks before deadline, about an hour per week. Can provide ideas, resources, support, time.
- ❑ Develop relationship with project officer. After you have discussed specific aims with your mentor, ask project officer whether he/she would mind commenting if your specific aims reflect the goals of program announcement. This conversation and commitments may make the critical difference later in the review.

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For more info, contact IC Health:

Dr Srinath Reddy
ksreddy@ccdcindia.org

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General Protocol Writing Tips--2

Isaac Kohane (Jan 2006)--\$45M for 15 grants

- ❑ Envision your audience (study section), the reviewers. What is their mindset? Consider that they have traveled a distance, may be tired, and may not have read applications unless they are primary, secondary or third reviewer. You must "win" in the first page, with your specific aims. Follow with a second-page diagram, which details the project, and to which you refer throughout.
- ❑ Repetition is good. Subtleties can get lost to your reviewers. Repeat specific aims, and remind them of your structure.
- ❑ Use diagrams, figures. A good diagram paints broad brushstrokes of project and presents a timeline of yearly progress. This guides the committee to assess your ability to deliver what you propose.

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General Protocol Writing Tips--3

Isaac Kohane (Jan 2006)--\$45M for 15 grants

- Propose less than you can do.
 - Best offense is a good defense. Show you recognize your weaknesses in design and how you propose to problem solve. Do not be arrogant; modesty will not turn off reviewers but will show you recognize limitations.
 - Make sure there is a real educational plan, building a knowledge base, a block of new courses, not just a research proposal.
 - Use exquisite detail—if not there, it is assumed that you have not thought about it.
 - Make sure literature includes relevant publications and do not forget about the publications of study section members (where relevant).
 - Be clear and organized. Use simple language, not jargon.
-

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“The hypothesis is unencumbered by any supporting evidence. The budget is the only part of the application which seems to have any substance whatsoever.”



- Anonymous NIH study section member

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Other Tips--1

- Re-read your protocol. Does it answer all questions on how the research will be done?
 - Have someone unfamiliar with the study read the protocol
 - Do they understand it?
 - Ask for input and error correction
 - Does the protocol read like a draft of a scientific paper? –It should!
-

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“A man may do research for the fun of doing it but he cannot expect to be supported for the fun of doing it.”

- J. Howard Brown

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Other Tips--2

- For long protocols, add Table of Contents
 - Structured abstract
 - Next: Flow chart or study schematics
 - Main research protocol
-

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WORKSHOP 2

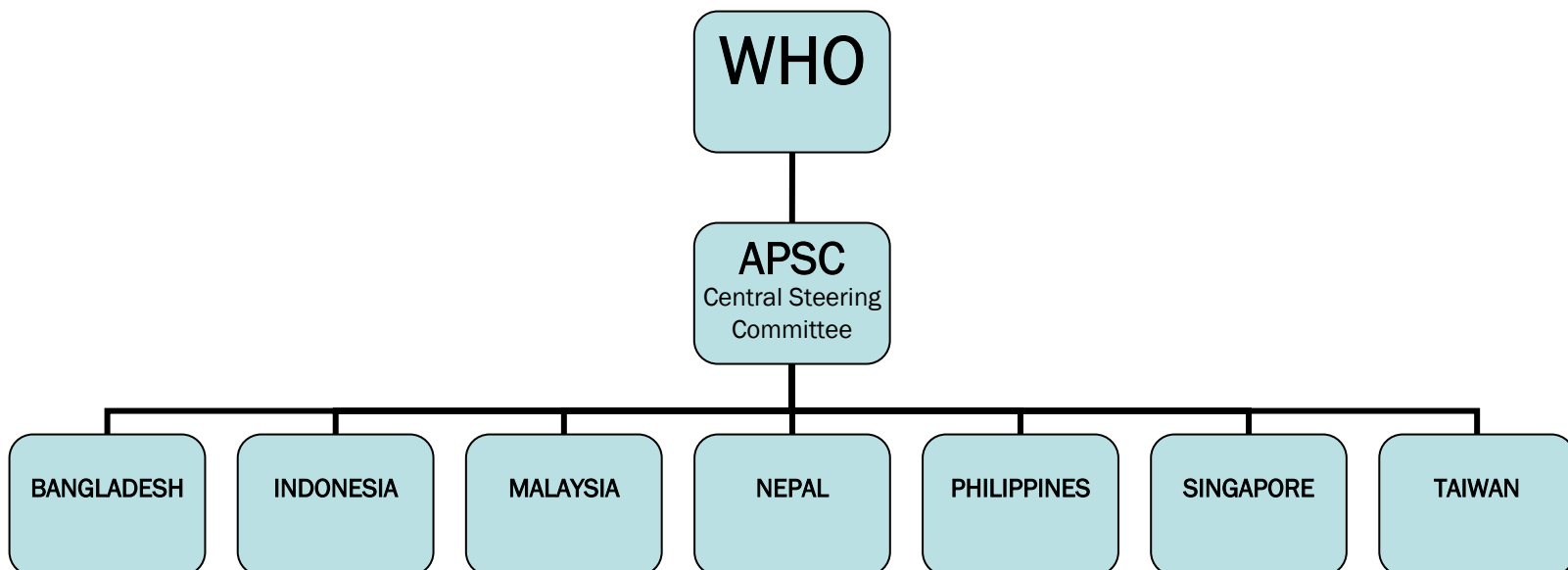
Promoting Collaboration/Partnerships in Cardiovascular Research in the Asia Pacific

“An epidemic disease in Asia Pacific has become a great concern plaguing the region. The World Health Organization (WHO) has called upon the APSC to collaborate with its members to come up with the necessary networking and partnership to overcome this epidemic.”

The scenario above was presented to the participants to build and create a team and establish a work plan with the following stipulations:

1. Function/s of the team
2. Objectives of the team
3. Expected outputs
4. Timetable

Dr. Arumugam of Malaysia was appointed as the team leader. The team presented the diagram below to show APSC and its members' role in the pursuit of its goal to control the disease. As shown, APSC, which has been mandated by the WHO to control the epidemic shall form a Central Steering Committee and encourage member countries to join the drive of controlling the disease. The Committee is composed of representatives from each country. Each country representative then forms a group in each country of their jurisdiction so as plans and decisions made from the central committee shall be disseminated down to the country groupings. Consequently, these groups give feedback regarding carried out plans to the central committee.



1. PHASE 1 : Data collection and sharing of information (Timeframe: 3 months)

The team must identify:

- What is the problem?
- What is causing the problem?

- At the first stage of the project, data pertaining to the causes and extent of the disease shall be collected. It may be noted that the prevalence in one country may be higher or lower than others.
- Success and failure in one country may be different from others.
- Communication and coordination of the committees and country groups will be thru e-mail and/or face-to-face meetings.

2. PHASE 2: Protocol development

- Once data has been collected, a face-to-face meeting may be arranged for the committees to meet and develop a uniform protocol and methodology.
- What will we do?
- How will we monitor the status of the project?

3. PHASE 3: Implementation (Timeframe: 3 months)

4. PHASE 4: Evaluate (Timeframe: 3 months (next 6-9 months))

- Progress in each country is evaluated
- After 3 months of implementation and the protocol does not work, modification is done.

The role of the APSC central committee is to highlight or draw attention to the problem to those concerned and monitor the status of the problem (identify stake holders)

Multisectoral stake holders:

1. Local government (non-govt. groups)
2. Doctors (cardio / non-cardio)
3. Patient advisory groups
4. Media
5. Pharmaceuticals
6. teachers/midwives/soldiers – reach remote parts of the country non-health
7. health care providers

Objectives :

1. To control and prevent the epidemic
2. Monitor programs of different task forces
3. Apply successful strategies among member countries

Expected Output :

1. Healthy living (stop progression of the disease)
2. Collected data
3. Shared data (find out what country is successful or not and why)
4. Identification of new issues

Assessment of the committee for its readiness to embark on the problem at hand using the tool below was conducted.

Tool to Assess Readiness for Intersectoral Action

CONDITIONS	QUESTIONS	REMARKS
NECESSITY	Is the planned action important to achieve organizational goals?	Yes
	Does it ensure/enhance organizational survival?	Yes
OPPORTUNITY	Are there adequate opportunities for the planned action to be undertaken and sustained by supportive environmental contexts?	Yes. The task force of each country has been assigned to involve major stakeholders.
	Are there clear “triggers” for action?	Yes. 1 st trigger – mandated by WHO 2 nd trigger – upon data gathered, course of action is decided upon
CAPACITY	Have the health sector and the other participating organizations have the capacity to undertake the action that is being planned?	Yes. Plan of action will be done with partners.
	Is there a need to strengthen organizational support?	Yes
	Is there a need to identify resources for use in developing, negotiating, implementing, evaluating and sustaining the planned action?	Yes
RELATIONSHIP	Has the nature of the relationship between the sectors/organizations involved been negotiated?	Yes
	Is there a high level of trust and respect between the organizations?	Yes
PLANNED ACTIONS	Do the people involved directly in the planned action recognize the need to work together?	Yes
	Is there an agreed way of working?	Yes
SUSTAINED OUTCOMES	Are there ways of monitoring the outcomes of the action over time?	Yes through best practices sharing, monitoring and evaluation
	Are the sectors aware that they may need to take ongoing action to sustain the outcomes? – intensive way 9 months – may be beyond 9 months – yes aware	Yes

Action Plan

*“Where do we go from here?
Who is in charge?
How will work be done?
When will work be done?”*

Research Priorities:

1. Tobacco Control Strategies
2. Epidemiology of CVD
3. Risk Factors of CVD
4. Disease Registries
5. Guidelines / Policies
6. Clinical Trials / Studies
7. Advocacy and Social Marketing
8. Knowledge Translation
9. Genomics

Results show that the top three research priorities identified by the APSC workshop participants were:

- Tobacco Control Strategies
- Epidemiology of CVD
- Risk Factors of CVD

Other priorities are also enumerated above.

- These priorities will be presented to the APSC Executive Council for approval.
- Budget constraints may limit the priorities to be pursued to the top 3 or 4 research priorities.
- The APSC Research Task Force ideally will comprise of a representative from each of the 17-member countries. Each participating country will form its local task force in their country and will be represented in the APSC Central Committee.
- Participants may present the priorities to their local organizations before final commitment.
- A country may select a topic in congruence to its country's priorities and interested countries may join in the development of the protocol and implementation of the project.
- The APSC may raise funds for the development of a protocol.
- Communication with members will be done regularly (e-mail or teleconferencing)
- It has also been suggested that since there are readily available information and data on Tobacco control, member countries may access them and compare information with other members. This will enable the task force to determine and review strategies and programs being implemented and possibly adapt the strategy in other locations. APSC may determine how it can contribute further to its implementation. It need not be a full research.
- The following member country representatives expressed interest in specific priorities:
 - Prof. Regmi – Risk Factors of CVD
 - Prof. Mohibullah – may help in Epidemiology in CVD
 - Prof. Wita – Risk Factors in CVD but will have to consult other societies in his country

- Dr. Tan – needs to consult with societies in Singapore
- Dr. Arumugam Malaysia – Tobacco control strategies
- Dr. Ong – Epidemiology in CVD
- The APSC-PHA joint symposium is scheduled on May 24-27, 2006 and the member countries may give their response and commitment by then.
- Iranian Heart Association could sponsor another meeting (Oct. 31-Nov. 3, 2006)

The workshop also provided a venue for APSC to identify other concerns that need to be addressed.

For APSC Action

1. Funding
2. Capacity Building
 - APSC may explore possibilities of conducting seminars/workshops on how to conduct research correctly and developing research protocols.
3. Collaboration
4. Organizational Structure
 - There is a need for the revitalizing and restructuring of the organization, ensuring that the role of APSC to facilitate collaboration is strengthened.
5. Infrastructure
 - The need to update the website was also raised. The body was informed that maintenance of the website will be turned over to the Secretariat.
6. Socialized Membership Fees
7. Database of Researches and Researchers

Workshop Evaluation

- Facilitation was very good.
- Organizers should be commended for its efforts in achieving the workshop objectives and goals.
- The workshop was able to accomplish its objectives and has encouraged commitment from the members.
- The collaboration exercise was very effective.
- We got more from what was expected
- New information was presented and will be very useful in the future.

ABOUT THE WORKSHOP FACILITATORS and SPEAKERS

NINA CASTILLO-CARANDANG, MA, MSc

Prof. Carandang is a sought after sociologist and health social scientist based in the Department of Clinical Epidemiology, College of Medicine at the University of the Philippines in Manila.

She has acquired her Master of Arts degree in Sociology at the Ateneo de Manila University in Manila. She also has a Master of Science degree in Clinical Epidemiology from the McMaster University in Canada and is a candidate for a doctorate degree in Philosophy in Medical Anthropology from the University of Amsterdam, Netherlands.

MARY ANN LANSANG, MD, MSc

A multi-awarded researcher, Dr. Lansang is an infectious disease specialist and a professor of the College of Medicine at the University of the Philippines. She was the immediate past Executive Director of INCLIN Trust and has joined and headed various health advocacy organizations.

Her leadership and significant contributions to the improvement of health encompasses not only local organizations but most especially world renowned health organizations.

EUGENE REYES, MD

Dr Reyes has been an active member of the Philippine Heart Association and is Ex-officio chairman of the Council on Preventive Cardiology of PHA. He is a senior clinical consultant at the Philippine General Hospital and a clinical associate professor of the Department of Medicine at the University of the Philippines.

AMENDMENT

The priorities initially set in the APSC Research Priorities Setting Workshop in Tagaytay, Philippines last April 7, 2006 have been reviewed. At the time of documentation, the results were tabulated and recomputed. The table below explicitly shows the participants' total scores per topic based on the criteria given: (1) relevance; 2) avoidance of duplication; 3) feasibility; 4) political acceptability; 5) applicability; 6) urgency; and 7) ethical acceptability. Averaging was based solely on the total scores and ranking were based from these.

Participant	Topic 1	Topic 2	Topic 3	Topic 4	Topic 5	Topic 6	Topic 7	Topic 8	Topic 9
1	15.50	16.00	13.00	15.00	13.50	20.50	20.50	13.50	11.00
2	17.00	12.00	12.00	17.00	17.00	16.00	16.00	12.00	8.00
3	15.00	15.00	15.00	14.00	13.00	15.00	15.00	15.00	12.00
4	18.00	16.00	17.00	17.00	19.00	18.00	18.00	15.00	12.00
5	13.00	13.00	12.00	16.00	8.00	21.00	21.00	9.00	7.00
6	16.00	16.00	19.00	17.00	15.00	15.00	18.00	16.00	15.00
7	19.00	16.00	19.00	17.00	16.00	21.00	21.00	16.00	12.00
8	18.00	16.00	15.00	15.00	19.00	19.00	15.00	15.00	11.00
9	18.00	16.00	17.00	16.00	15.00	20.00	20.00	14.00	15.00
10	13.00	17.00	17.00	14.00	16.00	18.00	17.00	16.00	12.00
11	16.00	14.00	17.00	19.00	12.00	19.00	18.00	13.00	11.00
12	17.00	17.00	15.00	16.00	18.00	15.00	16.00	14.00	14.00
13	17.00	15.00	18.00	12.00	17.00	19.00	19.00	16.00	10.00
TOTALS	212.50	199.00	206.00	205.00	198.50	236.50	234.50	184.50	150.00
AVE	16.35	15.31	15.85	15.77	15.27	18.19	18.04	14.19	11.54
RANK	3	6	4	5	7	1	2	8	9

Initially considered the top three priorities, their order of rank now indicate as 1) Epidemiology of CVD; 2) Risk Factors of CVD; and 3) Tobacco Control Strategies as the ranking research priorities for APSC.

APSC Research Priorities

RANK	TOPICS	SCORE
1	TOPIC 6 Epidemiology of CVD	18.19
2	TOPIC 7 Risk Factors of CVD	18.04
3	TOPIC 1 Tobacco Control Strategies	16.35
4	TOPIC 3 Disease Registries	15.85
5	TOPIC 4 Guidelines/Policies	15.77
6	TOPIC 2 Clinical Trial Studies	15.31
7	TOPIC 5 Advocacy/Social Marketing	15.27
8	TOPIC 8 Knowledge Translation	14.19
9	TOPIC 9 Genomics	11.54

PARTICIPANTS' DIRECTORY

Name	Society / Designation	Email Address
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3. Dr. Noe A. Babilonia,	Chair, Intl Affairs Philippine Heart Association	noe.babilonia@gmail.com
4. Dr Homobono Calleja	Past President Philippine Heart Association	Tel 632 7244338 Fax 632 7231113
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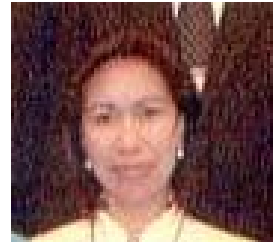
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