Non Communicable Disease Prevention and Control in Sri Lanka

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Policy Measures on Prevention and Control of Major Non Communicable Diseases

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WHY OUR CONCERN ON NCDs ?

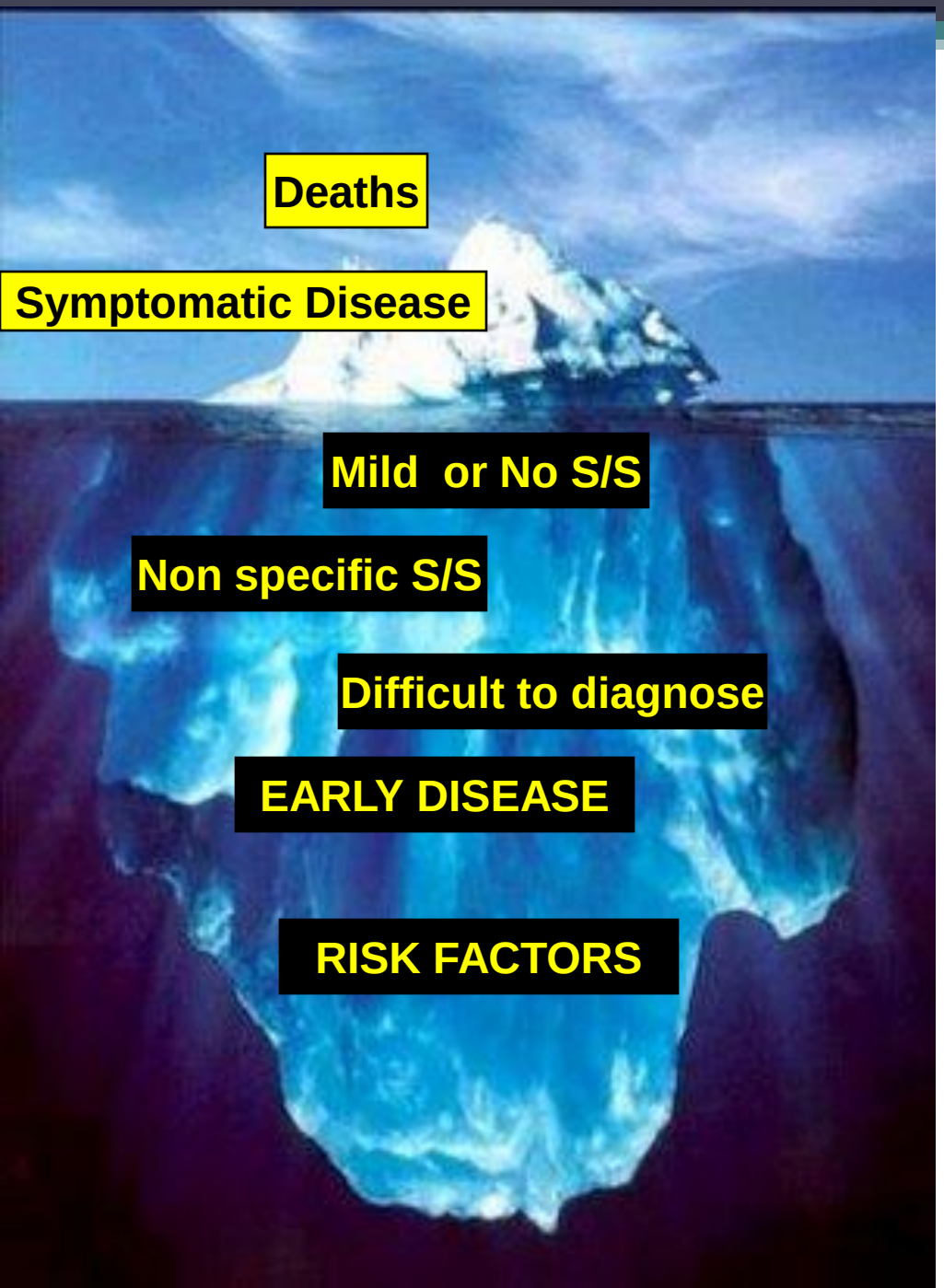
- Increase of deaths , hospitalization & disability due to NCD
- Future increasing trend of NCDs

- Issues in the provision of health care

  Unlike communicable diseases, NCDs are
  - Chronic in nature
  - Investigation & treatment are expensive
  - Require lifelong treatment

Adverse effects of NCDs

- Individual
  - Premature deaths
  - Affected quality of life
- Family
- Society
- Health service
- Economy of country



Chronic ill health

Screen to detect early disease

Health promotion

PREVENTION	AIM	TARGET
Primordial	Underlying conditions leading to exposure to causative factor	Total population or selected groups
Primary	Limit incidence by controlling causes & risk factor	Total population High risk individually
Secondary	Cure and reduce serious complication	Early detection and treatment
Tertiary	Reduce progress of complications	Therapeutic & Rehabilitative

Prevention of chronic disease

a) Population based approaches

- **Legislation (Tobacco, Food Labeling)**
- **Policy (Healthy eating - Canteen policy in Schools)**
- **City Planning (Walking & Exercise areas for the community)**
- **Education (School curricula, Teacher training)**
- **Social Marketing / Health promotion**

b) Individual based approaches

- **High risk**
- **Smoking**
- **Exercise**
- **Alcohol**
- **Stress**
- **Diet + Saturated Fats**
- **Drugs**

Key issues

- Increasing mortality and morbidity due to chronic NCDs
- High prevalence of risk factors in population
- High burden on institutions, health sector and economy as well

- Lack of cohesive, cost-effective preventive sector program aimed at NCD prevention
- Inadequate service provision in screening , treatment of NCDs at different levels of care
- Human resource constraints providing optimal care for NCDs
- Lack of comprehensive disease and risk factor surveillance system supporting policy makers
- Need more allocation on prevention of NCDs

Existing Measures in NCD Prevention & Control

Existing measures in NCD prevention & Control

Improving & strengthening service provision	Planned & piloted new interventions	Development of a national programme

Our goal will be

National Programme –
for NCD prevention and Control

- With the experience and result of successfully completed pilot projects

- Comprehensive and country-wide
- Based on proper policy and strategic plan


National Health Policy
National NCD Policy and strategic plan
District and operational plan
Central and district level structure
Capacity development of NCD team
National NCD Program

Annual Plan

Priority area I

- **Initiation to develop the national programme**

National NCD policy & strategic plan

Priority area II

- **Develop the Structure and Mechanism to implement the programme**

National Technical Working Group and with sub committees
Strengthen central level / provincial level NCD programme

Priority area III

- **Capacity development of the NCD team**

Priority area IV

- **Activities based on strategic plan** (At central / District level)

National NCD Policy

Vision:

A country that is not burdened with avoidable NCD deaths and disabilities.

Mission:

To reduce the burden due to chronic NCDs by promoting healthy lifestyles, reducing the prevalence of common risk factors, and providing integrated evidence based treatments for diagnosed patients.

Goal:

- The overall goal of the National NCD Policy of Sri Lanka is to reduce the burden due to chronic NCDs by promoting healthy lifestyles, reducing the prevalence of common risk factors, and providing integrated evidence based treatments for diagnosed patients.

Objective:

- To reduce premature mortality due to chronic NCDs by 2% annually through expansion of evidence based curative services and to reduce the prevalence of risk factors, through individual and community wide health promotion measures.

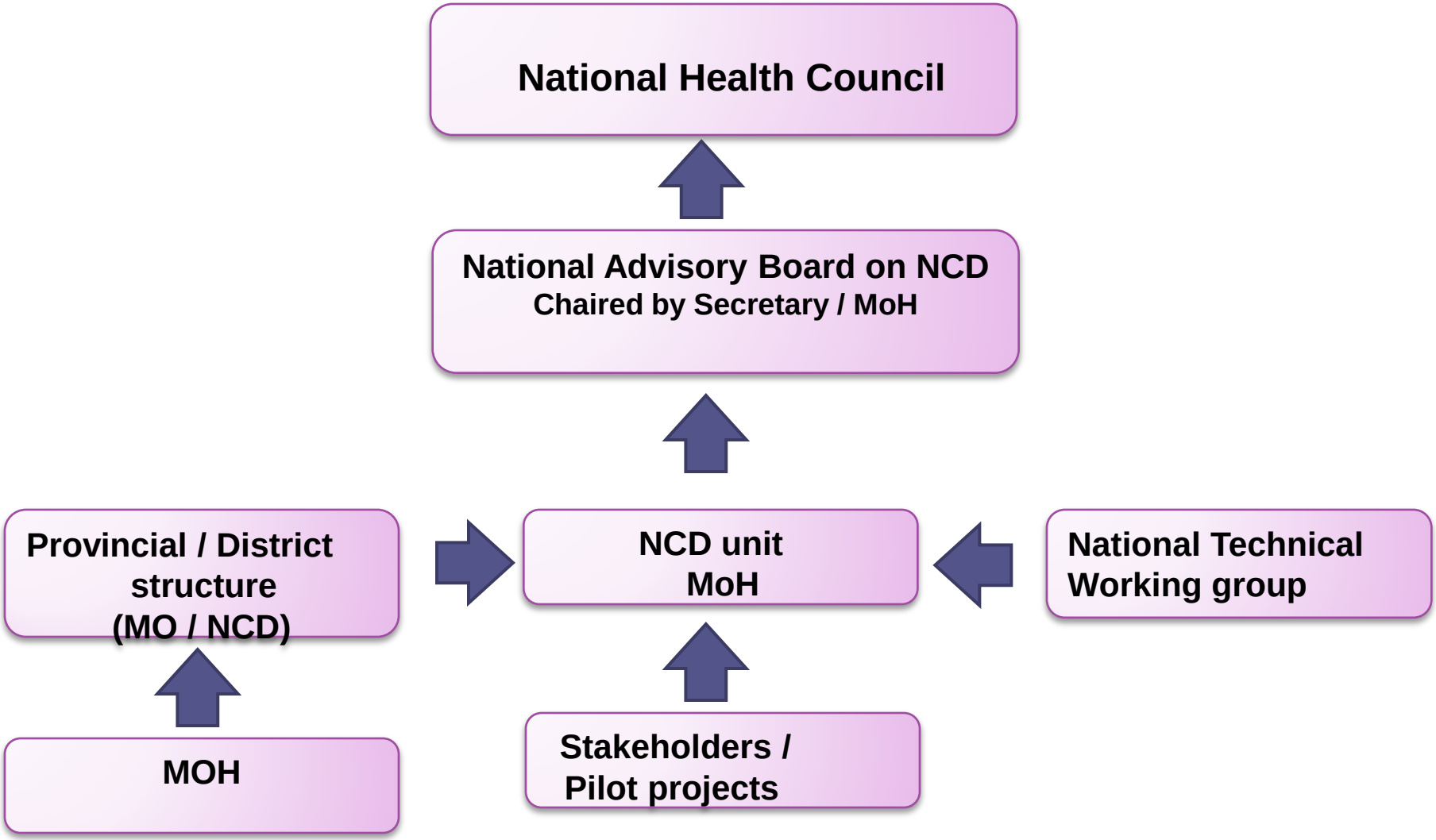
NCD Policy Key Strategies

- Support prevention of chronics NCDs by reducing level of risk factors of NCD in the population
- Implement a cost-effective Cardio Vascular Disease screening program
- Provide integrated , quality evidence based curative and preventive services appropriate for each level of care
- Encourage Community participation and empowerment for health promotion and disease control
- Enhance Human resource development to facilitate NCD prevention and care
- Strengthen National health information system including disease and risk factor surveillance
- Promote Research for prevention and control of NCD
- Facilitate coordination, monitoring & evaluation of prevention and control of NCDs and their determinants
- Ensure a sustainable financing mechanism that support both preventive and curative sector cost effective health interventions
- Integrate NCD prevention into policies across all government ministries, departments and private sector organizations.

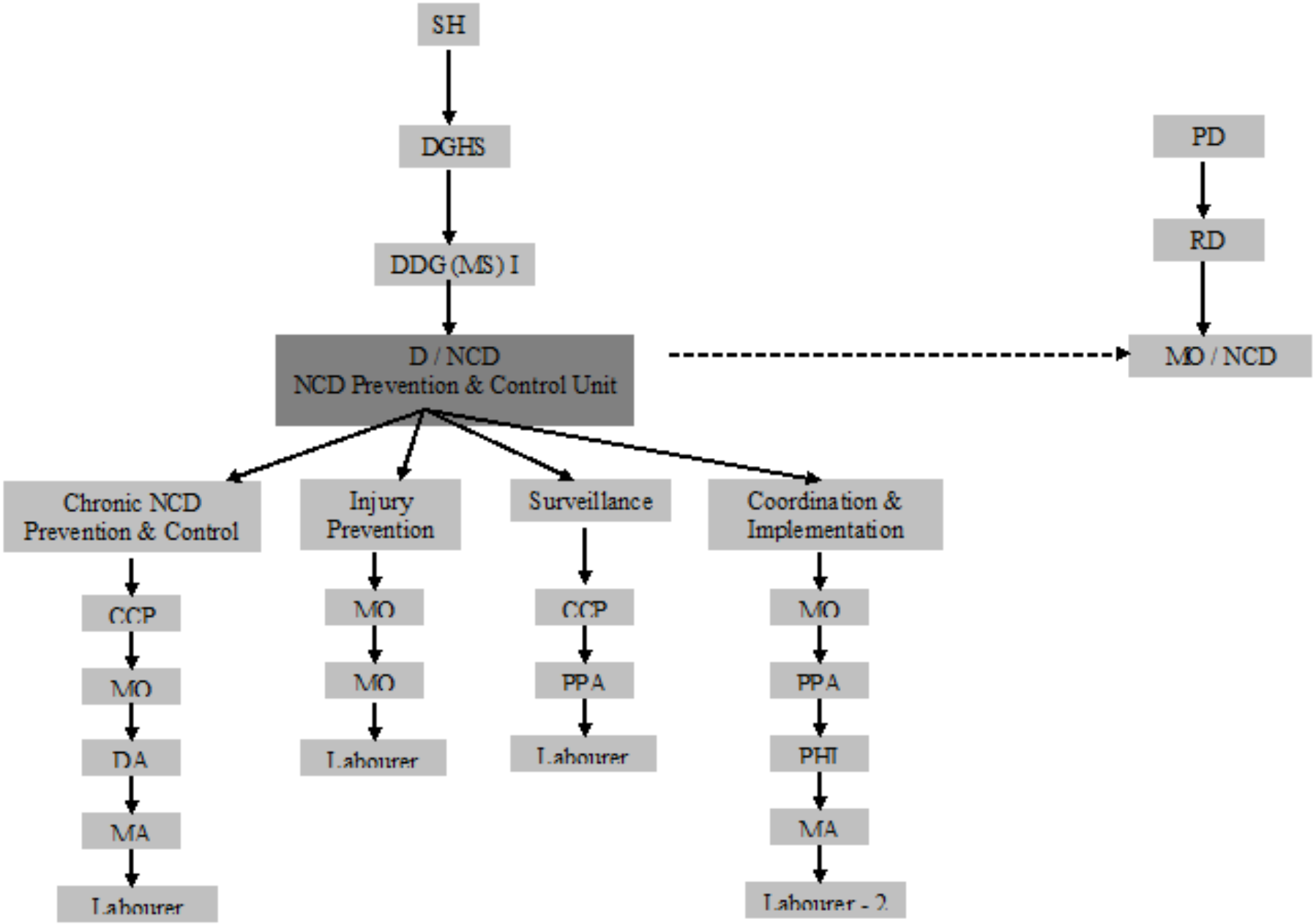
Main strategies
for NCD control and prevention

- Risk factor reduction and health promotion
- Screening for early detection and treatment
- Strengthening and improving current curative service (coverage, quality of NCD care and compliance)
- Risk factors / disease surveillance and reporting system
- Organization development and health financing
- Research

Coordination of National NCD Programme



Organization Chart



Capacity development of NCD team

- Medical Officers/NCDs and Medical Officers of Health already trained
- Training of Medical Officers in Primary & Secondary Care Institutions
- Public Health Midwife (PHM) and Public Health Inspector (PHI) NCD training
- ToT for volunteers and Leaders of target settings
- Development of National curriculum for training

Ongoing Activities

Coordination of current pilot projects

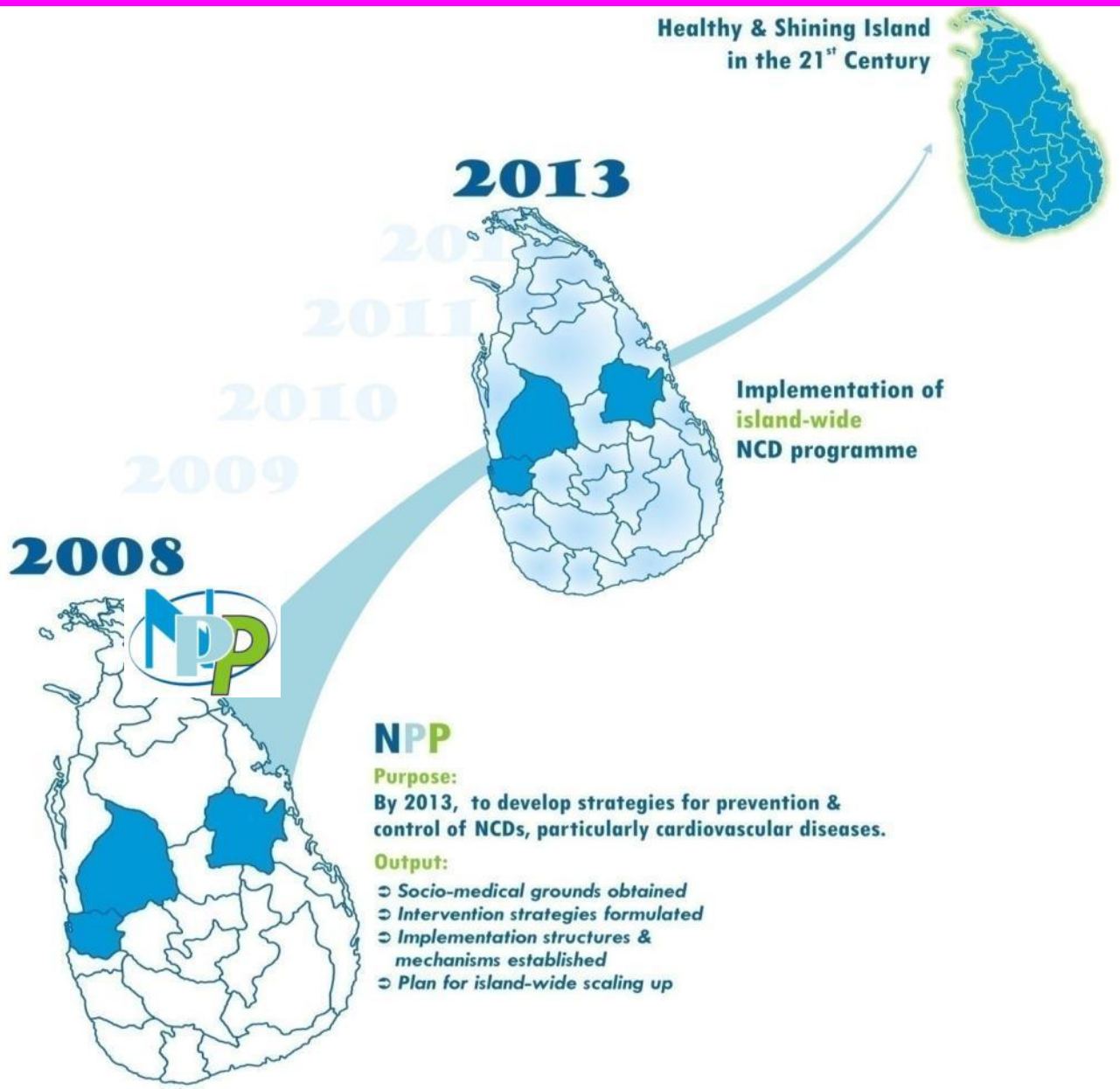
- NCD Prevention Project (NPP) – JICA
- PEN (Package of Essential NCD Interventions)- WHO
- NATA – Bloomberg Fund
- SLMA – MoH – WDF

  Diabetes Prevention project (NIROGI Lanka)

- WB (HSDP) – MoH
  Quality Improvement in Clinical Care
- Curative Care Survey - WB

JICA- Non-communicable diseases Prevention Project

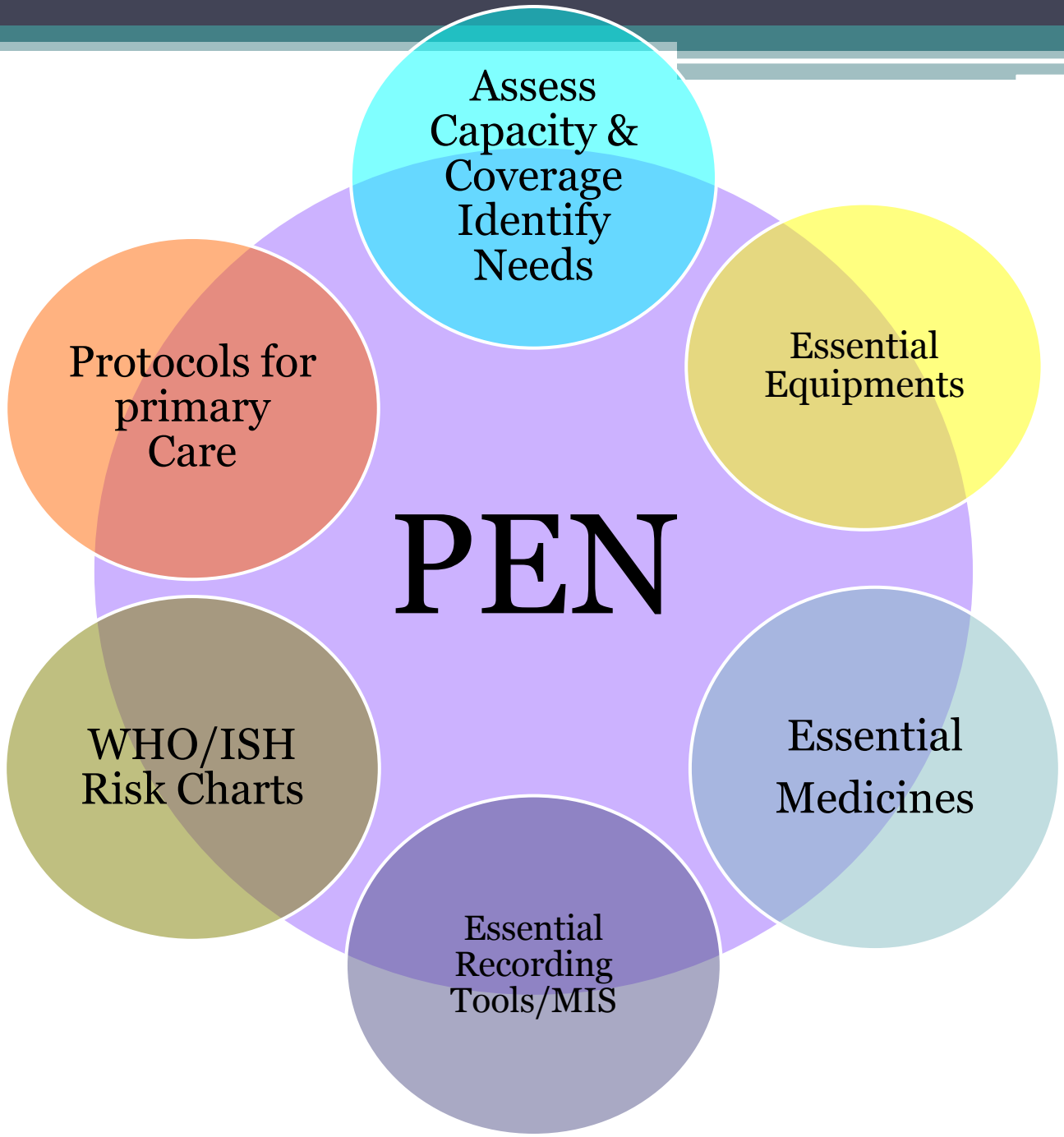
NPP Vision



WHO Package of Essential NCD Intervention for Primary Care in Low-Resource Settings (WHO PEN)

Ministry of Healthcare and Nutrition

World Health Organization
COUNTRY OFFICE FOR Sri Lanka


Assess Capacity & Coverage Identify Needs
Essential Equipments
Essential Medicines
Essential Recording Tools/MIS
WHO/ISH Risk Charts
Protocols for primary Care
PEN

DTF -Nirogi Lanka profect

To improve the quality of care in management of NCDs (DM)

- **Component 1:**
  Training of Nurses
- **Component 2:**
  Development of NCD Screening Centers and Diabetes Clinics at Central Dispensaries of CMC
- **Component 3:**
  Health promotion

Future Plans

- Implementation of Comprehensive National Programme
- Development of mass media awareness programme–with focus on risk factor prevention, direction to screening & compliance
- Development of cost effective screening progremme
- Strengthen health Promotion in all settings
- Mobilizing youth and leaders in each setting (eg: community, work) towards prevention of NCD
- Development of effective surveillance system
- Preparation of country report with all compiled data and promote researches
- Incorporation of NCD prevention into existing school curriculum

- Revision of NATA legislation for Tobacco Control to:
  - Ban Point of Sales advertising
  - Ban Smoking in all Public Places (Instead of “enclosed” spaces)
  - Amend to a conisable offence
  - Inclusion of Pictorial Health Warnings
- Strengthen the tobacco and alcohol control activities at district level
- Establishment of “Nutrition & NCD centres ” in tertiary & secondary care institutions
- Strengthen primary care institutions in screening and management of NCDs

- Steps undertaken to initiate formulation of a National Cancer Control Strategic Plan

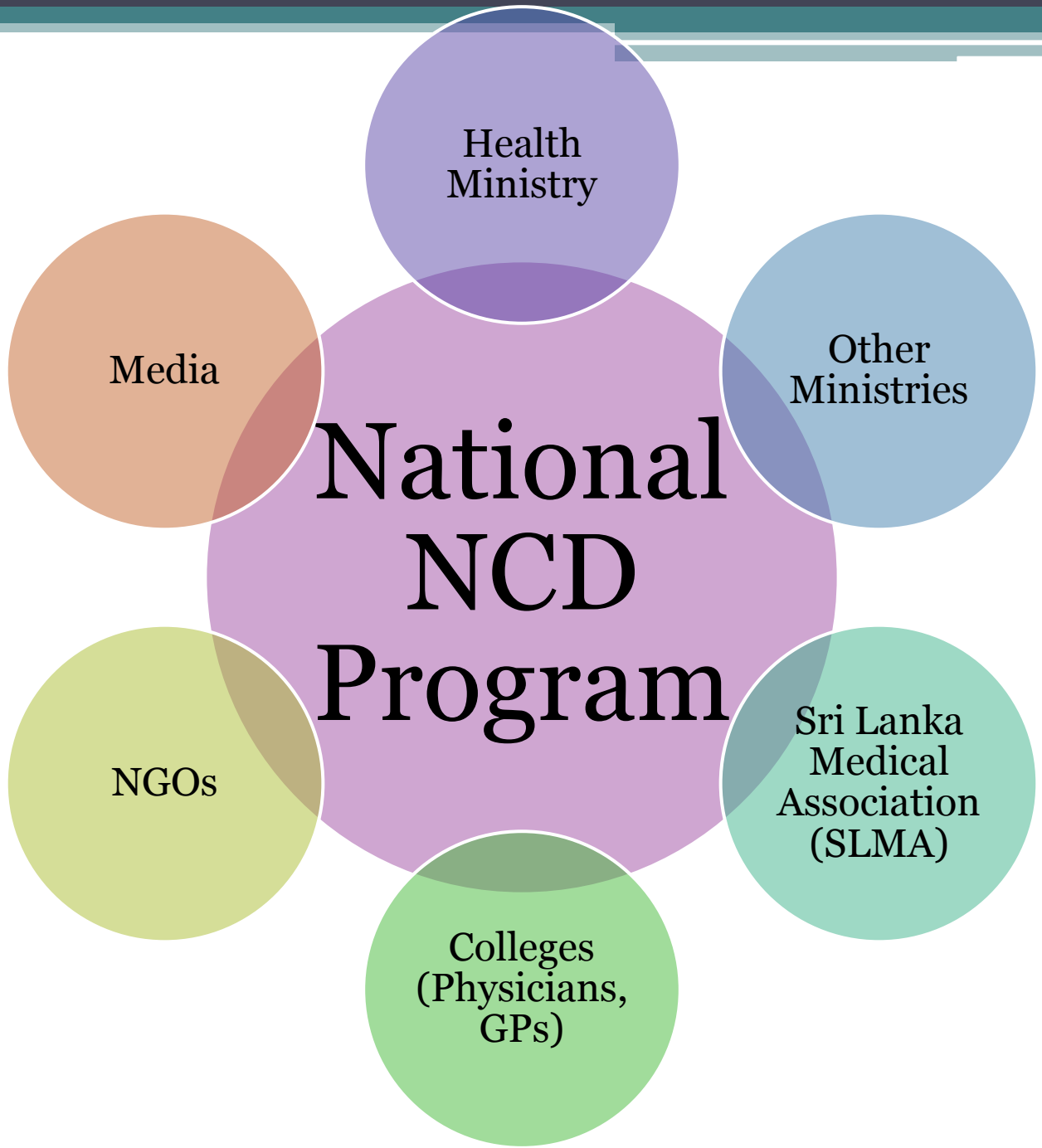
- Multidisciplinary Research effort underway to elucidate the cause of CKD of Unknown Origin

Involvement of other sectors / stakeholders

Health

is a collective responsibility of

- Individual
- Society
- Local government & other relevant sectors
- Health Ministry
- Government


Health Ministry
Media
Other Ministries
National NCD Program
NGOs
Sri Lanka Medical Association (SLMA)
Colleges (Physicians, GPs)

Health Ministry inter departmental collaboration

Inter Ministerial Collaborations

- Ministry of Education
- Health & Nutrition Ministry
- Ministry of Agriculture
- Ministry of Public administration & Home Affairs
- Ministry of Social Services
- Ministry of Media & Mass Communication

Funding Agencies

World Bank

JICA

WHO

STATUS QUO

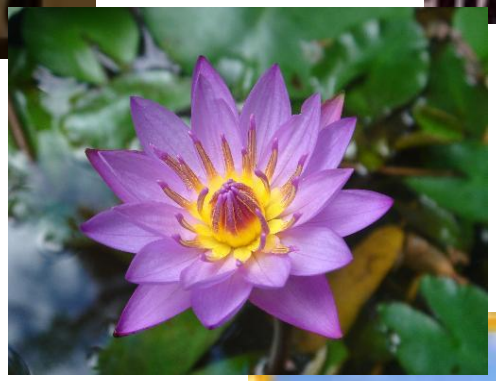
Act Now

THE CAUSES ARE KNOWN.

THE WAY FORWARD IS CLEAR.

IT'S OUR TURN TO TAKE ACTION.


Thank You



Thank You

Challenges in Implementing National NCD Programme

Challenges in the System :

- Lack of adequate NCD /risk factor surveillance system
- Lack of unified screening methodology and tools
- Quality improvement in clinical care
- Lack of standard guidelines for care, drugs and best practices
- Maintaining coordination between all sectors & stakeholders
- Behavioral change among the public
- Lack of cohesive, cost-effective preventive sector program aimed at NCD prevention
- Lack of adequate Monitoring & Evaluation system

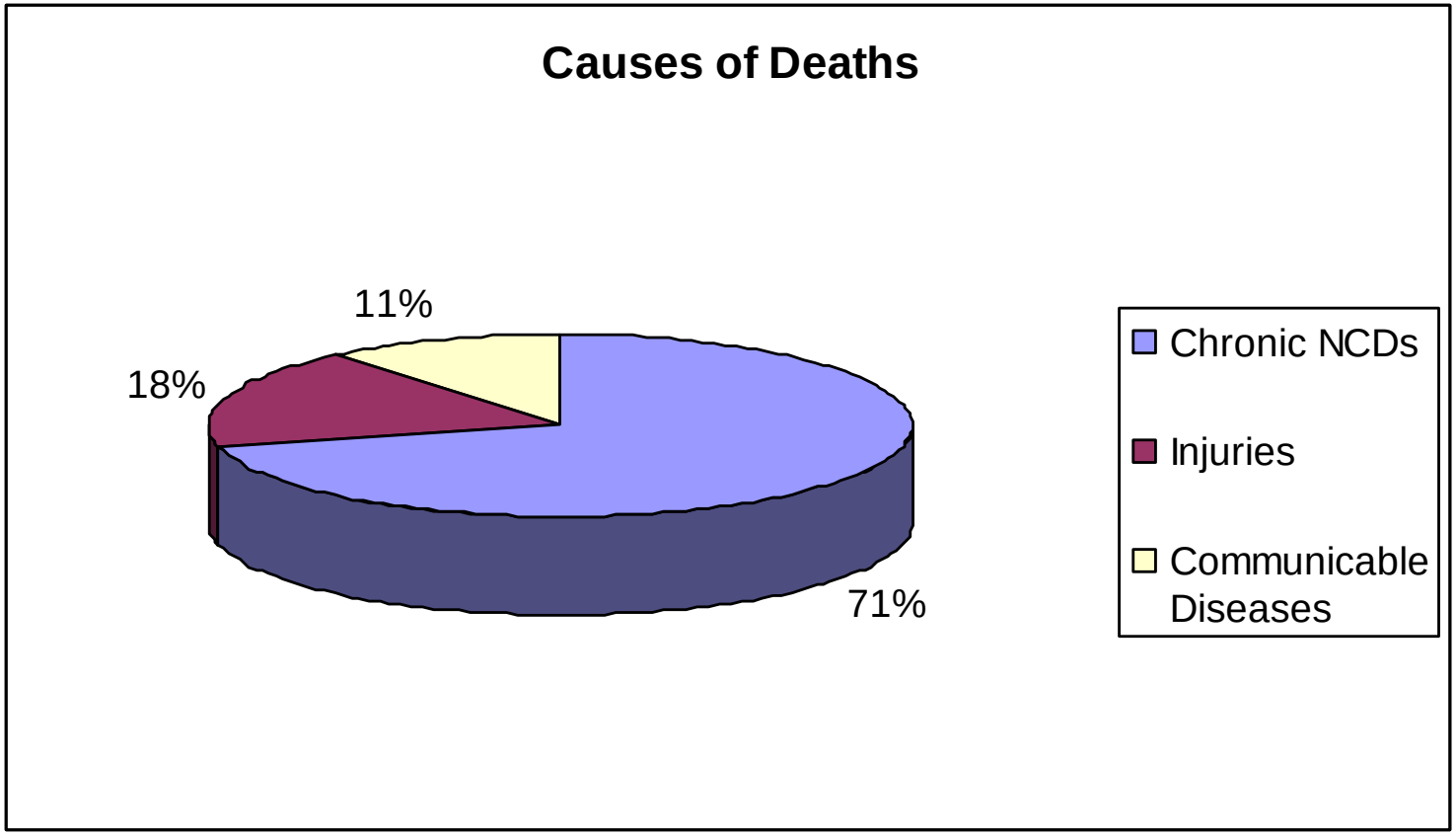
Challenges in Human Resources:

- Improving central level capacity
- Filling gaps in appointing of MO / NCD in all 26 districts
- Gaps in recruiting and training of staff for NCD care at primary and secondary care
- HR constraints for providing optimal care for NCDs
- Lack of Policy decision on model of primary health care set up
- Lack of policy decision on involvement of field officers (PHI & PHM) for community level health promotion, basic screening and follow up for NCDs

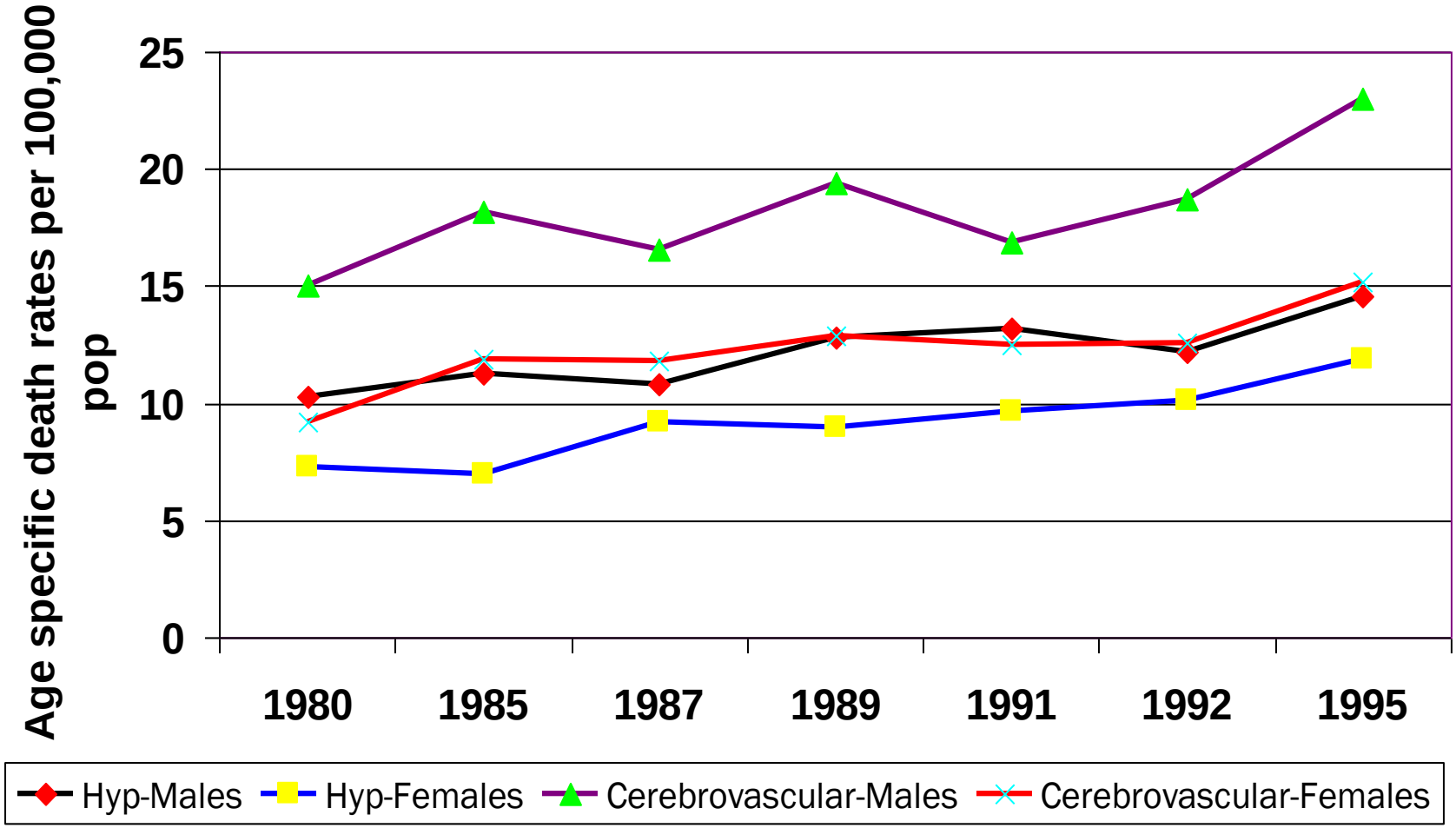
Challenges in Funding:

- Lack of funding for development of district level NCD implementation units
- Lack of funding for district level activities especially to replicate the WHO PEN in other districts
- Lack of funding for social marketing campaign

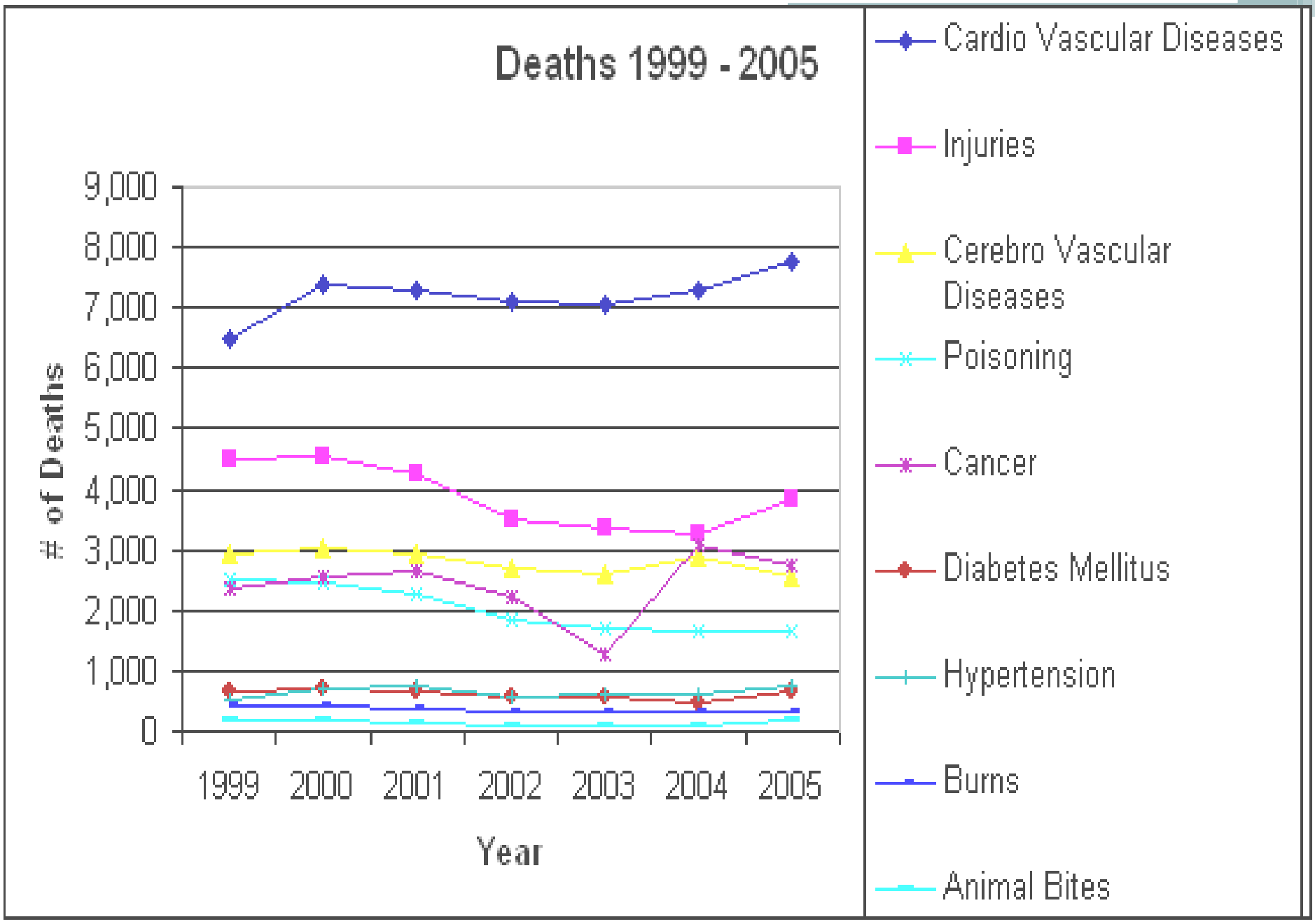
Mortality by major Disease category



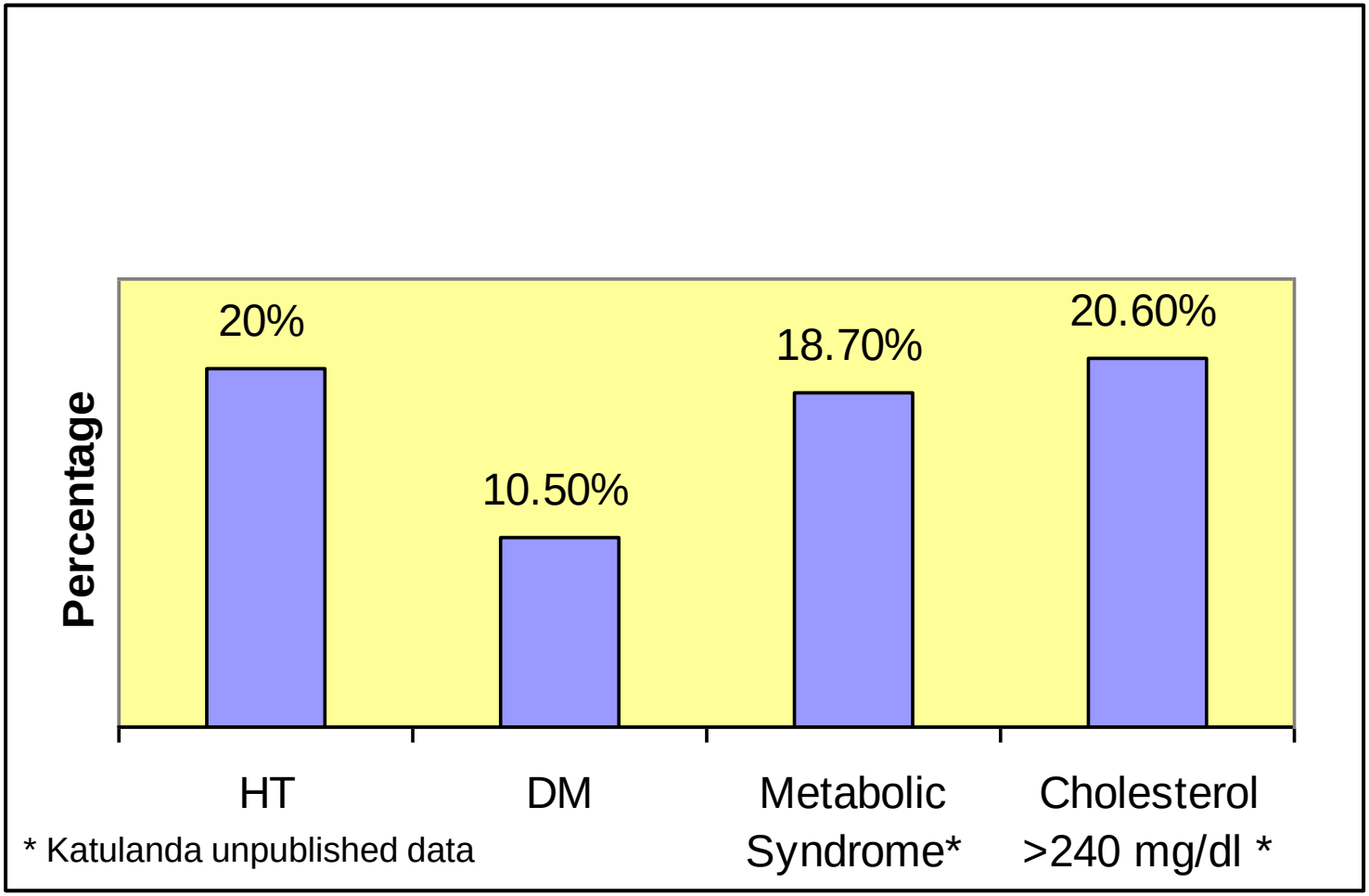
Trends in mortality from Hypertension and Cerebrovascular disease 1980-1995 – Sri Lanka



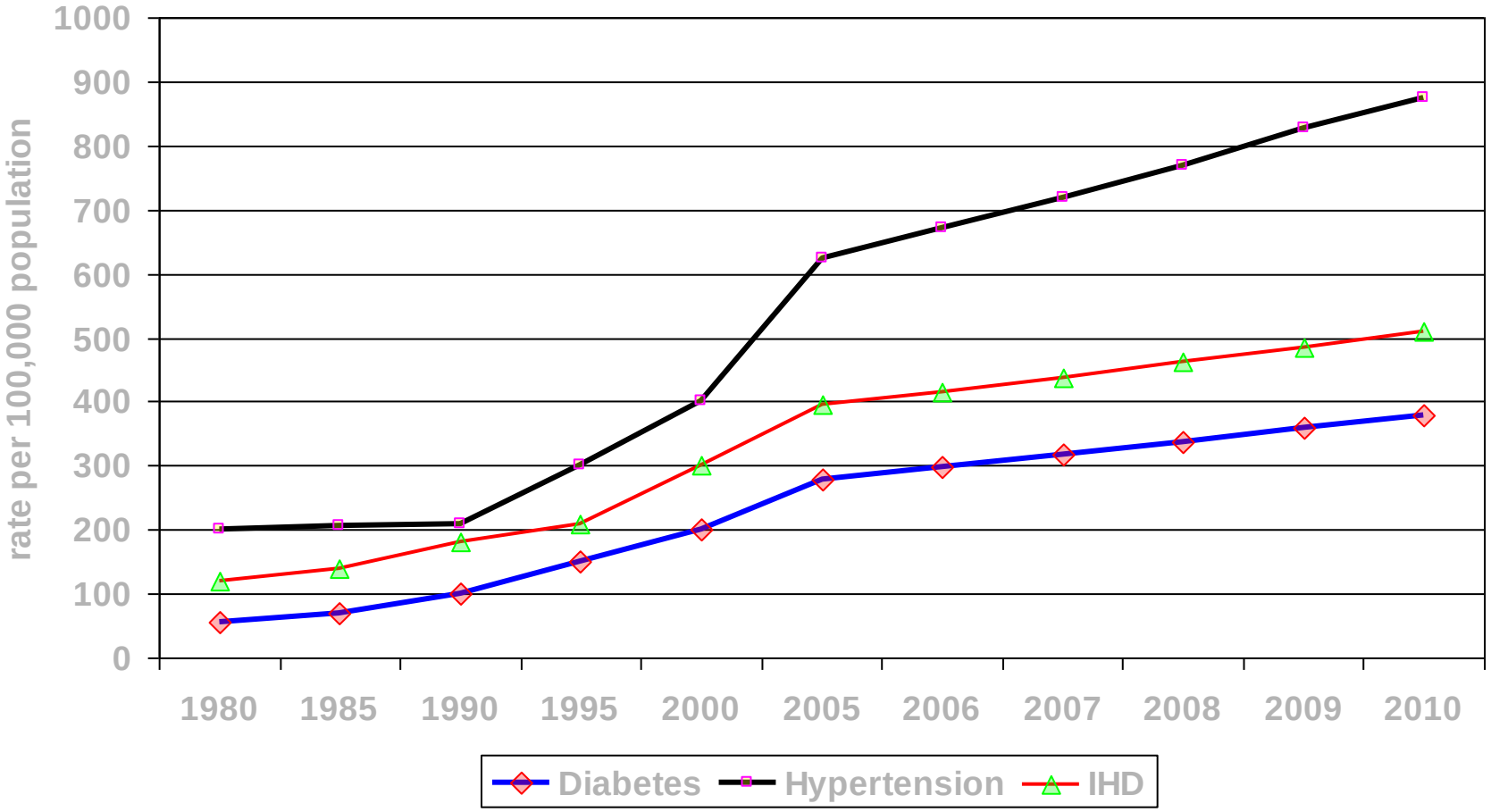
Source: http://www.who.int/healthinfo/morttables/en/index.html


Deaths 1999 - 2005
# of Deaths
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
1999
2000
2001
2002
2003
2004
2005
Year
Cardio Vascular Diseases
Injuries
Cerebro Vascular Diseases
Poisoning
Cancer
Diabetes Mellitus
Hypertension
Burns
Animal Bites

Morbidity – Prevalence of major NCDs

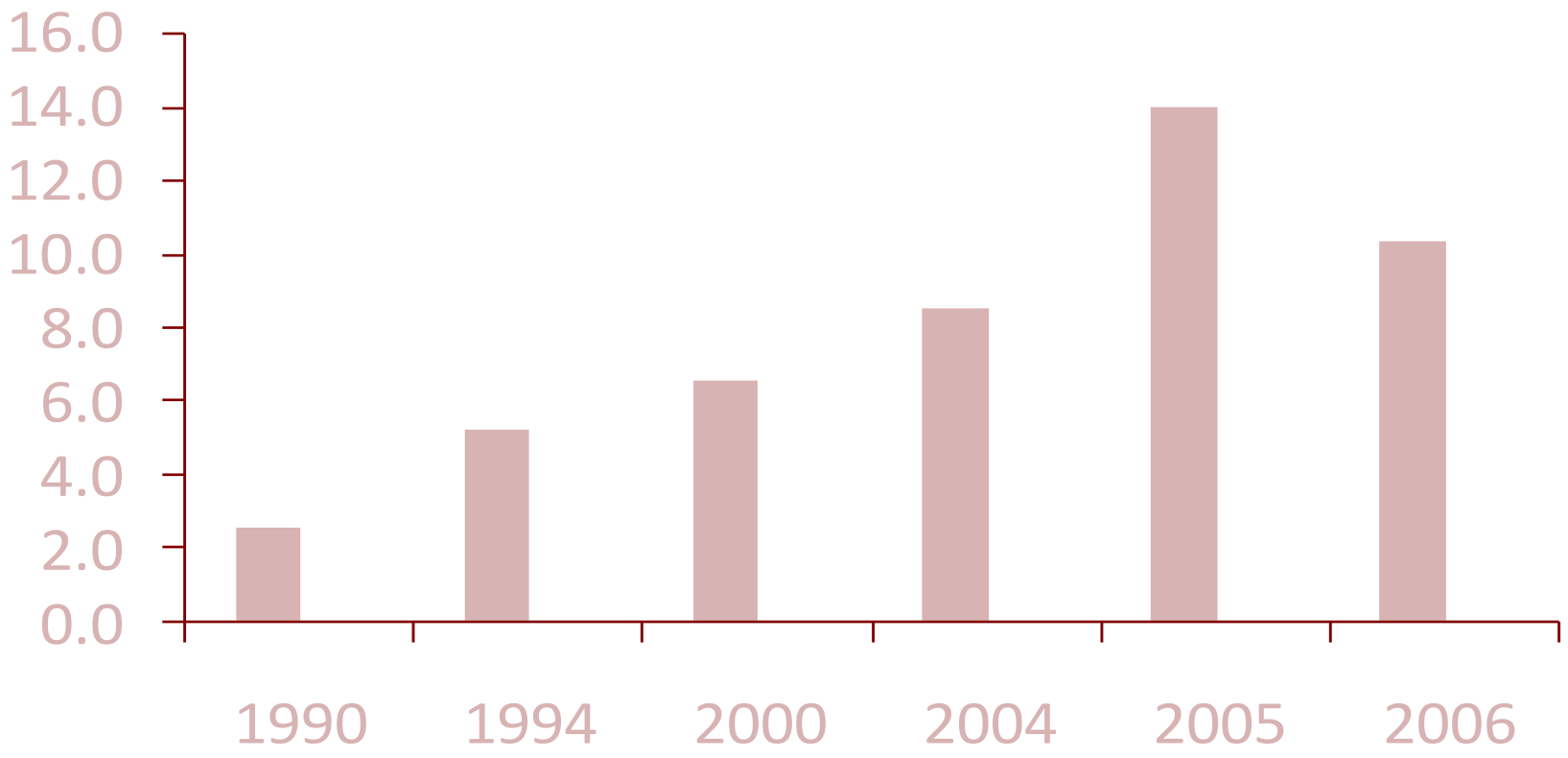


Projected increase of Hospitalisation due to Diabetes, Hypertension and IHD



Premaratne R et al. Hospitalisation trends due to selected non-communicable diseases in Sri Lanka, 2005-2010. *Ceylon Medical Journal*. 2005 June; 50(2):51-4.

Diabetic epidemic in Sri Lanka



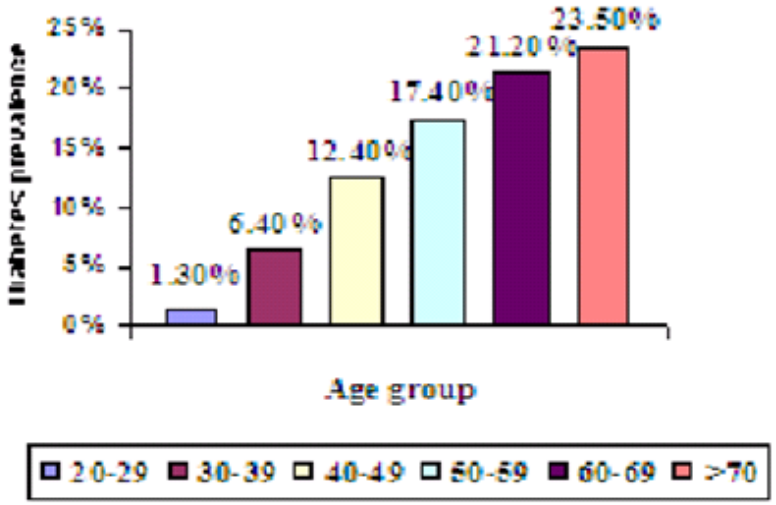
Rapid increase over last 20 years

Illangasekera, U. et al CMJ, 1993, Illangasekera, U. et al J R Soc Health, 2004, Fernando, D.J. et al Postgrad Med J, 1994, Mendis, S. Et al Int J Cardiol, 1994, Malavige, G.N., et al., Diabetes Res Clin Pract, 2002, Wijewardene, K., et al., CMJ 2005, Katulanda, P., et al, Diab Med 2006

Diabetic prevalence

Urban / semi urban population	18%
Rural population	10%
Average	15%

Age specific prevalence of diabetes



Katulanda, P. et al *Diabet Med*, 2008. 25(3): p. 1062–69.

Diabetes - Definitions

Stage of hyperglycaemia	Venous plasma glucose mmol/l (mg/dl)
Diabetes mellitus • Fasting • 2h post glucose load or random blood sugar	≥7.0 (126) > 11.1 (200)
Impaired glucose tolerance (IGT) • 2h post glucose load	7.8-11 (140-199)
Impaired fasting glucose (IFG) • Fasting	5.6-6.9 (100-125)
Normal • Fasting • 2h post glucose load	<5.6 (100) <7.8 (140)

Prevalence of IHD

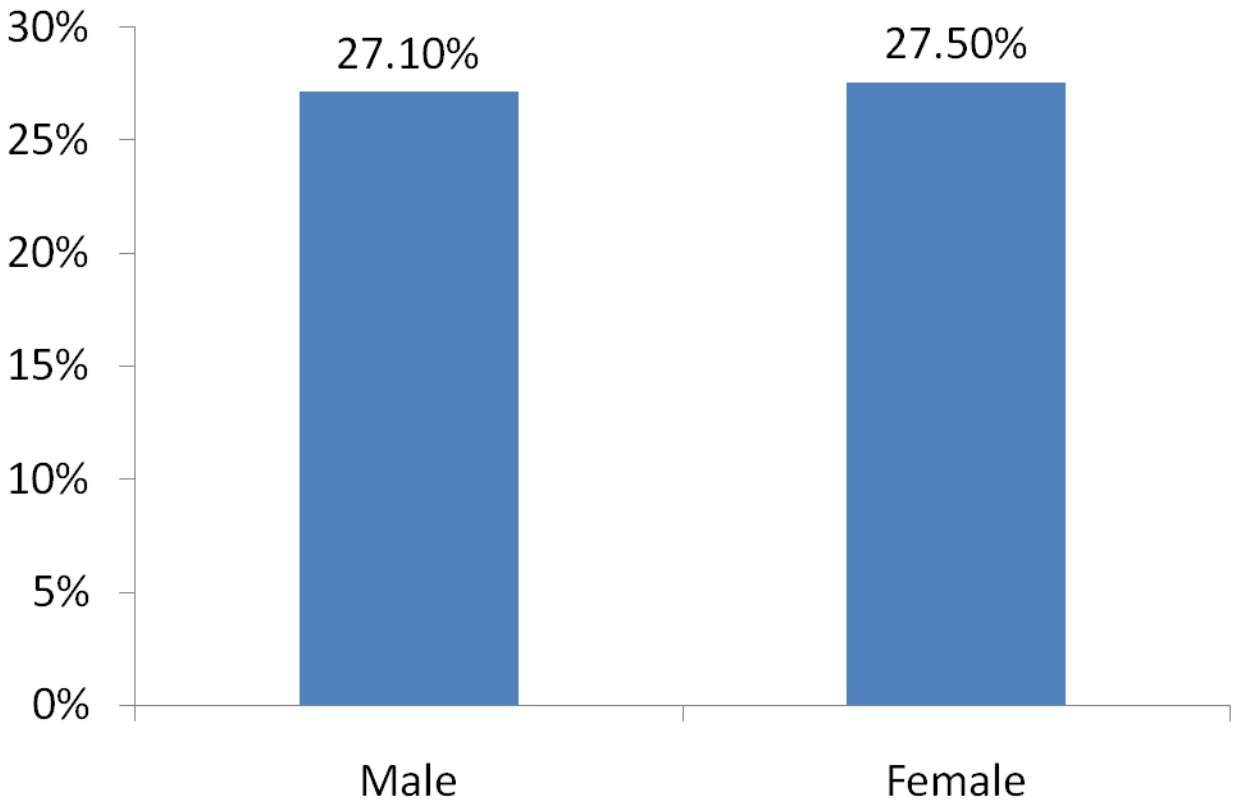
among 35-59
central province in 1994

Definitive evidence of ischemic heart disease (positive symptoms + ECG changes of ischemia)	16/1000
Evidence of IHD based on history alone	54/1000
Evidence of ECG changes of ischemia without symptoms	32/1000

(Shanthi M et al)

Prevalence of hypertension

Systolic blood pressure - 140mm Hg
Diastolic blood pressure - 90mm Hg



N = 4532

Katulanda et al., Unpublished data (Sri Lanka Diabetes and CVD Study)