#### Impact of Aging and NCDs on Healthcare Finance in Sri Lanka

#### **Workshop on Healthcare Financing**

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#### **Global Evidence**

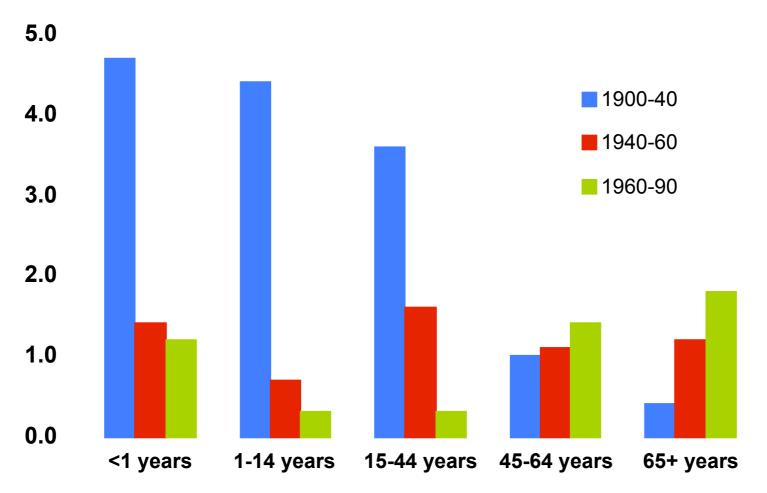


#### There's bad . . . and good news

- Ageing will lead to:
  - Shift in health care demands to those of older people (NCDs, chronic illnesses, disability)
  - Increase in frail, dependent elderly needing long-term care
- But good news:
  - Health of older people improving in richer countries
    - Most health gains in older adults
    - Disability rates in elderly declining (1-2% a year)
    - Ill-health being pushed back to final years of life (morbidity compression)
    - More years spent in good health
  - Ageing not proving to be the dominant factor increasing health care costs



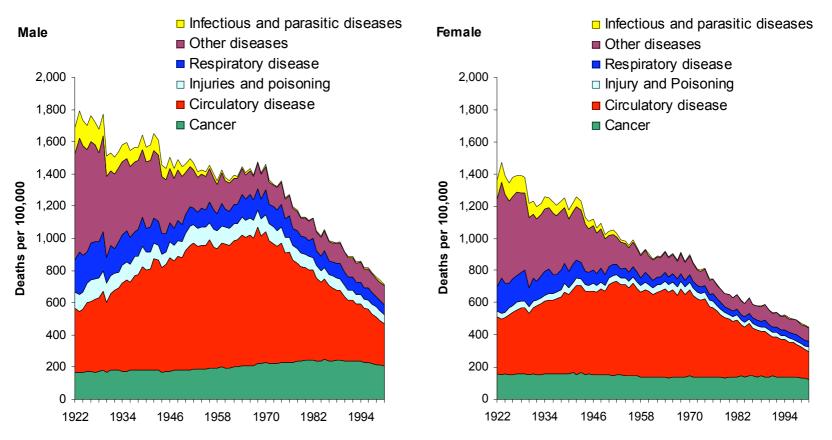
#### Gains in longevity shifting from mothers and children to older adults



Increases in life expectancy (years) by age group, USA 1900-1990



# Decline in death and disability in rich countries since 1970s due to NCDs, led by heart disease

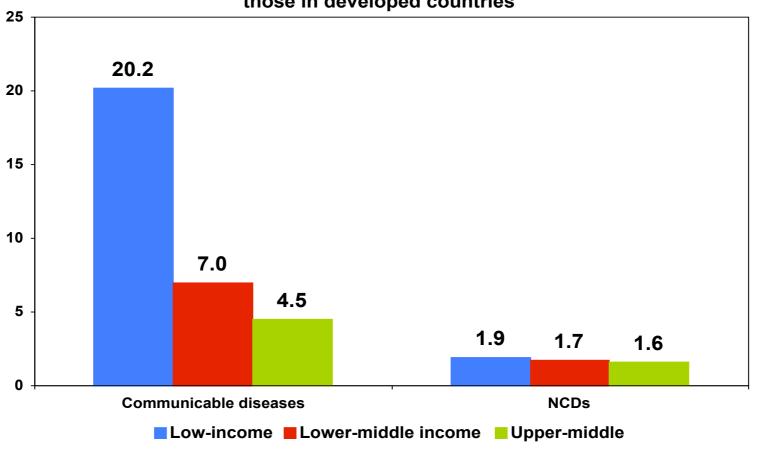


Changes in age standardized mortality rates by disease group, Australia 1922-2000 *Source:* John Goss, AIHW 2006)



# NCD rates increasingly higher in poor countries than rich ones

Ratio of age-standardized death rates in developing countries to those in developed countries



Source: Adeyi et al. (2007)



#### Medical treatment driving older adult health gains, more than prevention

- Evidence best for ischaemic heart disease (IHD)
- Epidemiological models indicate that medical therapies account for half of all reductions in heart disease deaths in rich countries, with rest due to control of risk factors, primarily smoking
- Econometric analyses suggesting a higher role for therapies in USA (65%)
- Recently, link shown between NCDs/ treatment and disability/frailty



But very little evidence on what is happening or might happen in developing countries . . . including Sri Lanka



#### IHP research response 2005-2007

Ravi P. Rannan-Eliya, Reggie Perera, Tharanga Fernando Indralal de Silva, ATPL Abeykoon

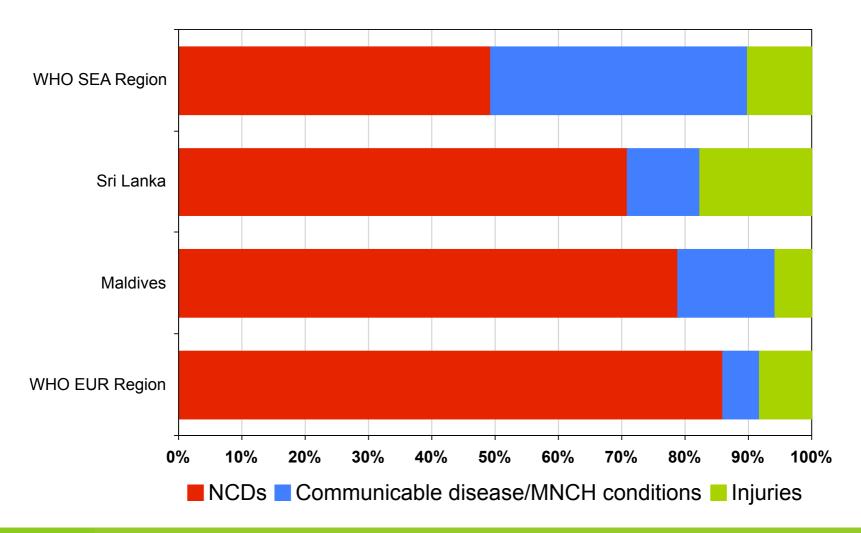
- Demographic projections 2001-2101
- Analysis of disability trends using Census data, 1981-2001
- Analysis of mortality trends using Registrar-General data, 1990-2001
- Modeling future health expenditure
- Case study of IHD
- Global and national literature reviews of impact of aging on health and NCDs



# Sri Lanka Finding 1 - Increasing NCD burden with ageing

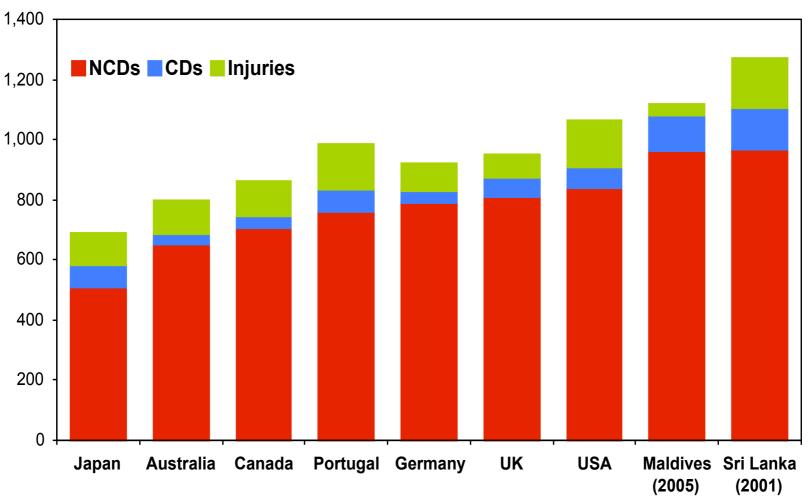


#### Non-communicable disease already dominates disease burden





# Mortality rates for NCDs in Sri Lanka already higher than OECD countries



Data are age-standardized mortality rates for 2000-2002



#### **Current NCD trends in Sri Lanka**

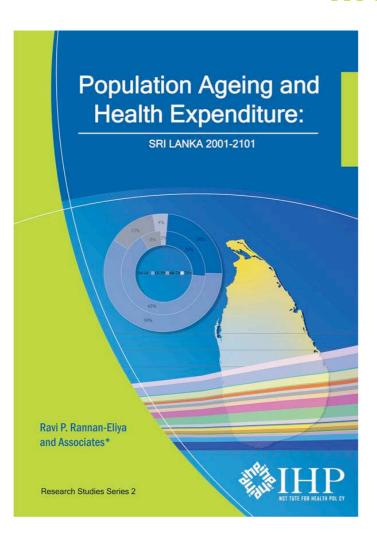
- Increasing ill-health from NCDs
  - Account for 71% of all deaths
  - Ischaemic heart disease (IHD) is number 1
- Differences with European nations
  - Heart disease rates higher, but increasing
  - Diabetes comparable, but increasing
  - Cancers lower
- Risk factors
  - Smoking and hypertension low
  - Hyperlipidaemia high
  - Poor foetal undernutrition/epigenetic effects



# Sri Lanka Finding 2 - Ageing will not be main driver of future healthcare costs



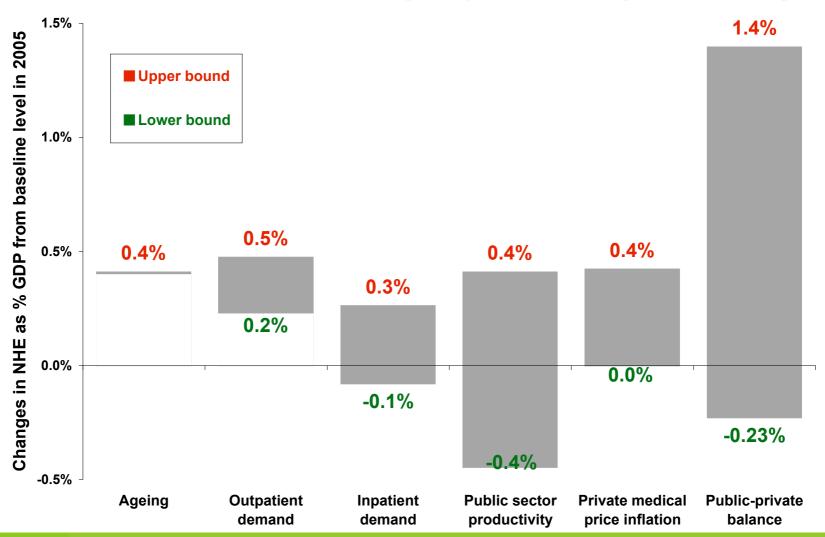
#### IHP Health Expenditure Projection Model



- Actuarial cost projection model
- Based on international best practice, and models used by USA, UK, OECD, etc
- Parameters:
  - age and sex structure, public sector productivity, private sector price inflation, changes in healthcare use, involvement of public sector
- Time horizon
  - 2005-2101
- Scenarios
  - (1) Status quo, (2) Public sector strengthening, (3)
     Private sector reliance



# Impact of key cost drivers on national spending by 2025 (% GDP)

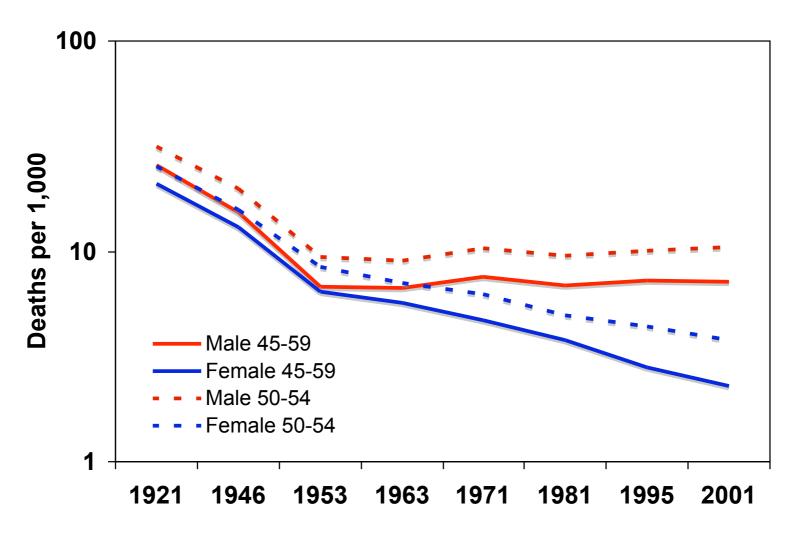




# Sri Lanka Finding 3 – No evidence of improving older adult health (morbidity compression)

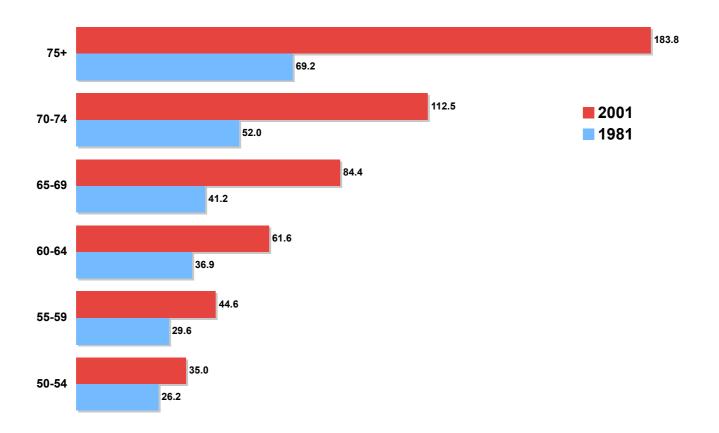


#### Life expectancy not improving in older men since 1970s





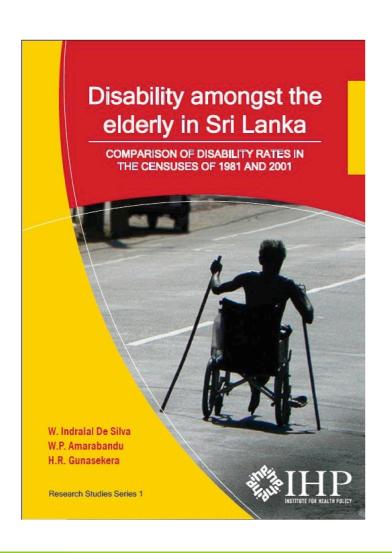
# Census data show disability is increasing in elderly, 1980-2001



Analysis of Census 1981 and 2001 Census data by De Silva and colleagues (2008)



#### For more information



Disability amongst the elderly in Sri Lanka:

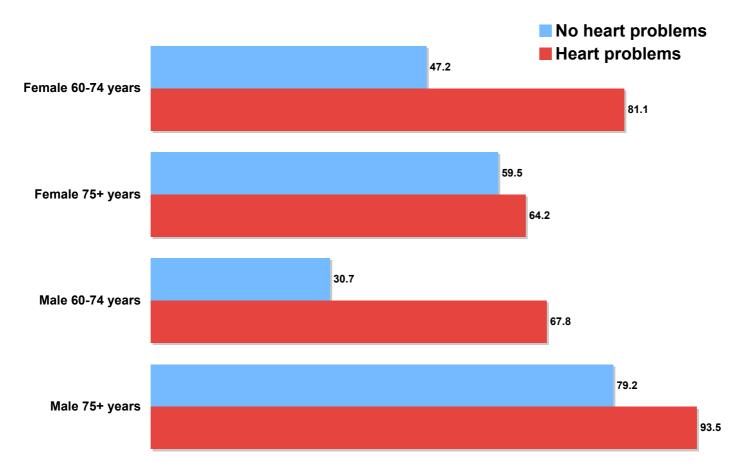
Comparison of disability rates in the Censuses of 1981 and 2001

De Silva, Amarabandu and Gunasekera (2008)

**IHP Research Studies Series 1** 



# Increases in NCDs and older disability may be linked



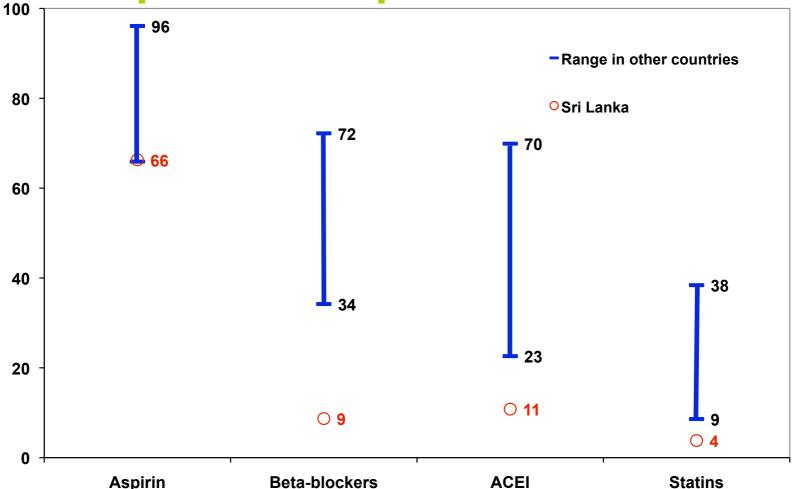
Prevalence of disability in elderly, by whether having heart disease (WB SLAS 2006 data)



# Sri Lanka Finding 4 – Under-treatment of NCDs is systematic failure in otherwise effective and equitable health system



# Systematic under-treatment of heart patients in public sector

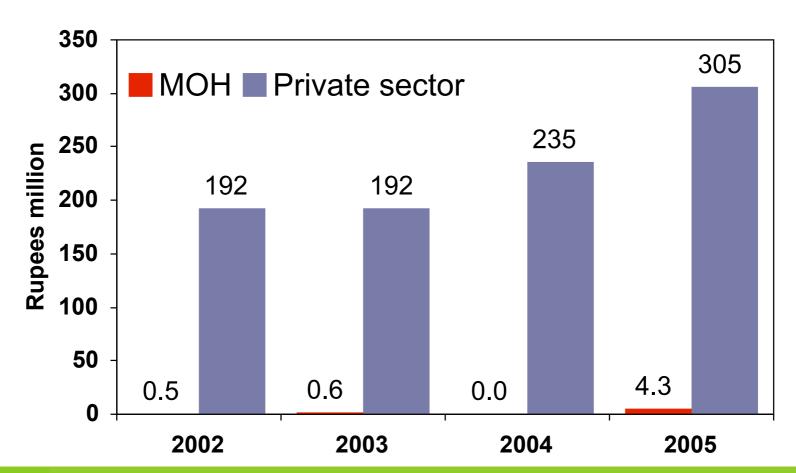


Survey of heart patients in 10 developing countries by WHO (Mendis et al., 2005)



# ... due to lack of public financing shifting cost of treatment to patients

Purchases of statins by MOH and private sector





#### **Current situation**

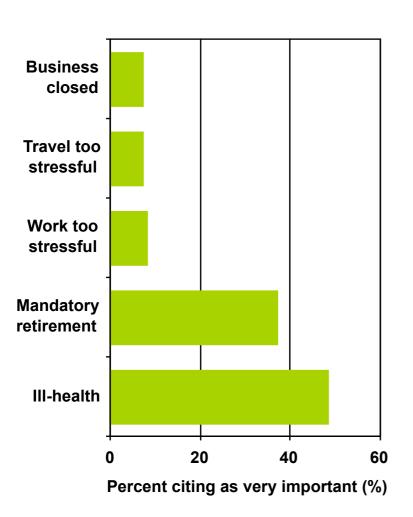
- No national policy to treat NCDs
  - Outdated focus on prevention only, no longer supported by scientific evidence
  - No strategy for treating NCDs, or for rationalizing clinical management
- Consequences
  - Critical cost-effective NCD medicines not stocked
  - Lack of NCD medicines largest cause of cost-sharing and patient dissatisfaction in public sector
  - Source of increasing inequity in access to care and risk protection
    - Some patients cannot afford, and doctors may be withholding advice from others



# Sri Lanka Finding 5 - Failure to treat NCDs is critical link between economic and public health responses



#### Ill-health in older workers is leading cause of withdrawal from workforce



#### WB Sri Lanka Aging Survey 2006

- For private sector workers, ill-health is leading reason for older workers to stop working (>50%)
- For public sector workers, most important reason after mandatory retirement
- III-health is mostly chronic illness due to NCDs



#### Why the failure to reduce NCD burden matters for economy

- Increasing years in work and productivity of older workers must be core element in any economic response to ageing, but...
  - Workers will not support extending retirement ages unless they see real improvements in older adult health
  - Chronic illness and death due to NCDs directly reduces productivity in key age-groups
- Failure to treat contributes to future frailty and disability in elderly which increases long-term care costs



#### **Policy recommendations**



# 1. Reframe NCDs as an economic policy challenge, not just health

- Tackling the NCD burden is a key basis for increasing economy's capacity to cope with ageing
- Will require major changes in health sector approach to NCDs
  - Change is unlikely without appreciation that failure to respond has larger impacts than simply poorer health



#### 2. Invest in public financing for health care

- Public dominance of health care financing cheaper in long-run for government and households than relying on private financing
- Will need to increase public expenditure on health as a share of GDP and as share of total health spending:
  - To effectively control cost pressures
  - To ensure macro-efficiency
  - To ensure adequate investment in new healthcare needs



# 3. Retool healthcare system to meet challenges of ageing and NCDs

- Current primary care system not designed for emerging challenges:
  - Lacks integrated management of elderly health and treatment of chronic disease
  - Placing increasing burden on poor owing to lack of provision for needed medicines
- Need to modernize primary care model:
  - Introduce general practitioner-led delivery system
  - New funding for chronic disease medicines to outpatients

