Prevalence of and factors associated with non-communicable diseases in the elderly in Sri Lanka

Bilesha Perera*, *Nayana Fernando & Bimba Wickramarachchi,
University of Ruhuna, Galle, Sri Lanka
Ramani Perera
University of Sri Jayawardanapura, Nugegoda, Sri Lanka
Mohammad R. Torabi
School of Public Health, Indiana University, USA

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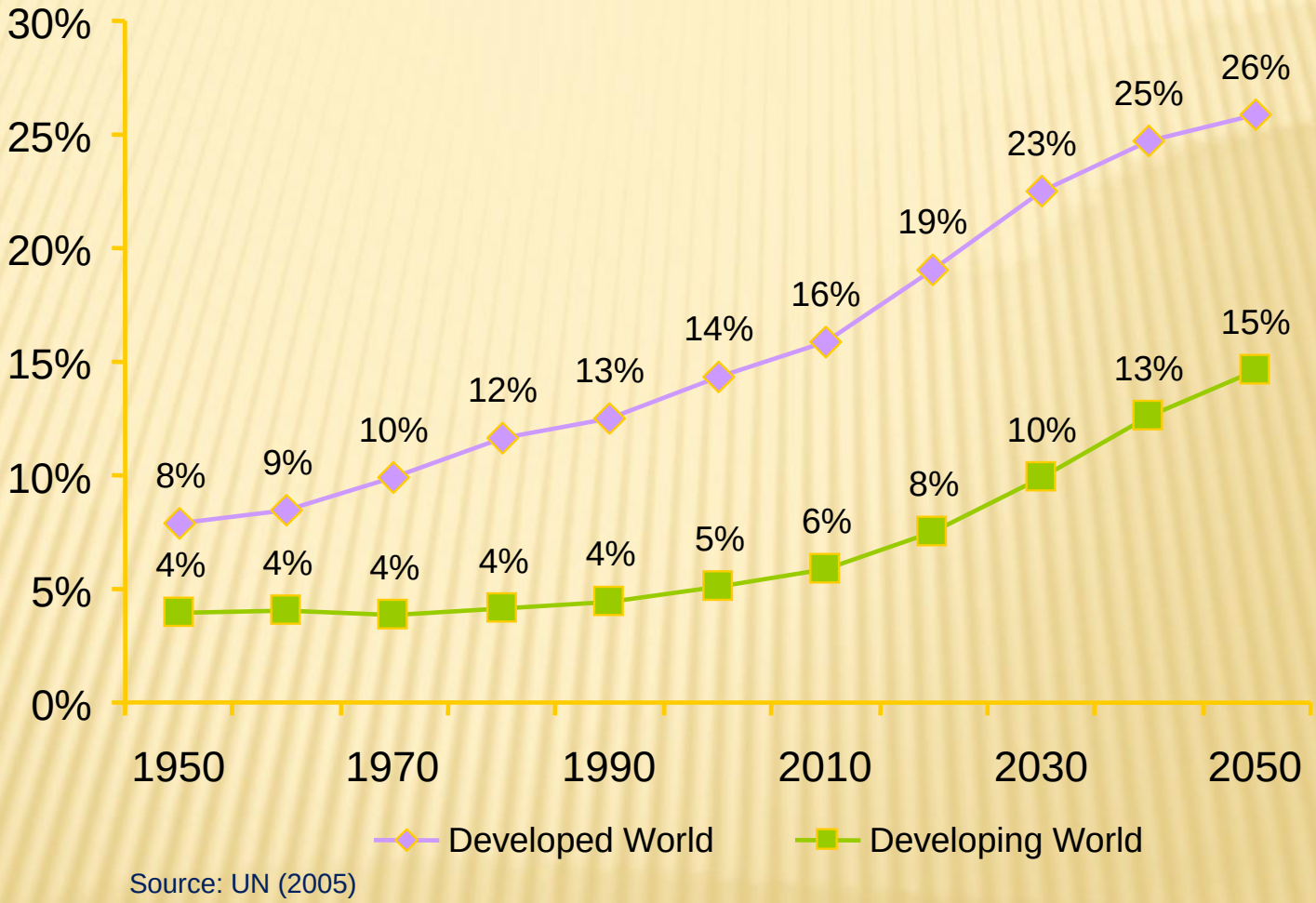
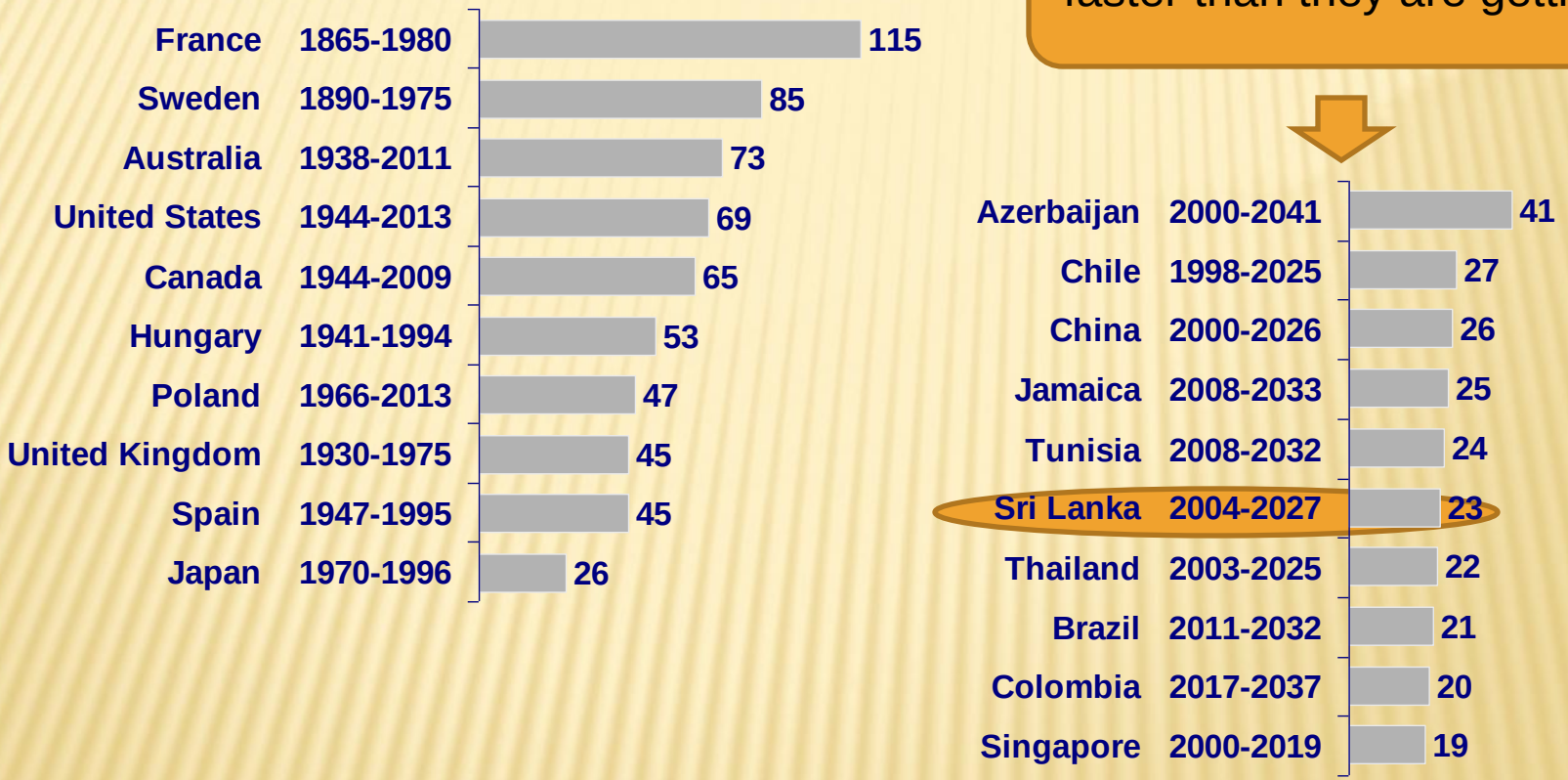
Percent of Elderly (aged 65 and over) Population – Global Trends



Source: UN (2005)

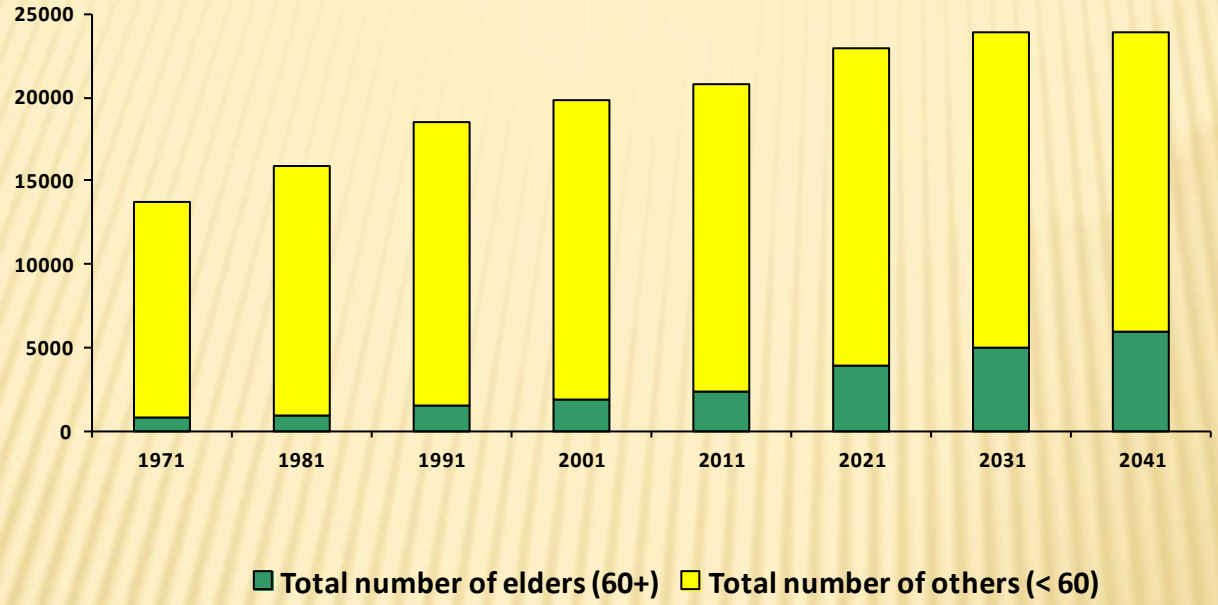
Number of Years for Percent of Population Age 65 or Older to Rise from 7% to 14%



Source: K. Kinsella and D. Phillips, “The Challenge of Global Aging,” *Population Bulletin* 60, no. 1 (2005).

The growth of the elderly population has contributed to accelerate the growing burden of chronic diseases and other ill-health conditions in low-and middle-income countries

Size of the Total and Elderly Population in Sri Lanka (1971 – 2041)



In 2000, 9.8% of the population in Sri Lanka was elders compared to 7.6% in India, 5.8% in Pakistan and 4.9% in Bangladesh. It is estimated that by the year 2030, the proportion of elders in the Sri Lankan population will grow up to 22%, and the corresponding figures for India, Pakistan and Bangladesh will be 14%, 8% and 10% respectively.

Aging will become the single most important Public Health Issue in Sri Lanka in the coming decades

The aim of this study was to examine some epidemiological characteristics of Non-communicable diseases (NCDs) in the elderly in Southern Sri Lanka.

Methods

A community survey

A purposive sampling method was used to recruit 443 elders (aged 60 and above) living in a southern district in Sri Lanka for the survey.

Interviewer administered questionnaire was used to collect data from the survey.

Demographic Characteristics (N = 443)

Characteristic	Male (n = 198)	Female (n = 245)
Age (in years)		
60 – 64	55 (28%)	76 (31%)
65 – 69	36 (18%)	46 (19%)
70 – 74	43 (22%)	48 (20%)
75 – 100	64 (32%)	75 (31%)
Marital Status		
Married (spouse alive)	163 (82%)	115 (47%)
Married (spouse passed away)	30 (15%)	120 (49%)
Single	5 (3%)	10 (4%)
Level of Education		
No Education	10 (5%)	30 (12%)
Primary	50 (25%)	68 (28%)
Secondary	133 (67%)	144 (59%)
Higher	5 (3%)	3 (1%)
Socioeconomic Status		
Poor ≤ 100 US$	90 (46%)	128 (52%)
Lower Middle 101-300 US$	33 (17%)	37 (15%)
Upper Middle 301-500 US$	52 (26%)	61 (25%)
Upper ≥ 500 US$	23 (12%)	19 (8%)

Women were more vulnerable than men to experience hardships in old age.

Over all, the proportion of widows among the elderly is higher than that of widowers.

Half of the respondents were in the poor income category The majority of elders (about 65%) were not receiving any financial support such as a pension or any other benefit from the government or from any other organization.

Physical Health Problems

Health Problem	Urban*		Rural *	
	Male (n=76)	*Female (n=127)*	*Male (n=122)*	*Female (n=118)*
Diabetes	16 (18%)	28 (21%)	20 (18%)	21 (19%)
High Blood Pressure	21 (24%)	64 (47%)	32 (29%)	41 (37%)
Heart Diseases	16 (18%)	25 (19%)	14 (13%)	19 (17%)
Asthma	17 (19%)	19 (14%)	22 (20%)	17 (16%)
Arthritis	37 (42%)	92 (68%)	52 (47%)	62 (56%)
Visual Defects	58 (66%)	95 (70%)	73 (66%)	58 (53%)
Hearing Defects	24 (27%)	36 (27%)	28 (26%)	14 (13%)

*There were few non-responses

Women were more vulnerable than men to suffer from chronic illnesses ?

Overall, those elders

who were aged 70 years or above
(OR = 2.58, CI 1.71, 3.87),

lived in urban areas
(OR = 2.28, CI 1.50, 3.46),

physically inactive
(OR = 2.31, CI 1.52, 3.50), and

with extended family
(OR = 1.94, CI 1.16, 3.26)

were more likely to report having at least one NCD at the time of the survey.

Family Income and *Level of Education* were also not related to having reported at least one NCD by the participants.

Those former “diseases of affluence” seems to affect lives of both rich and poor elders evenly in the Sri Lankan context.

Research conducted in low and middle-income countries such as India and Costa Rica found an association between higher SES and increased risk of developing NCDs while the opposite was observed in research conducted in high-income countries; higher socio-economic status has been associated with better health and longer lives.

Substance use

A significant proportion of elderly men in the study sample (25%) were alcohol and/or tobacco users.

We did not find any association between self-reported NCDs and substance use in the elderly men.

However, alcohol use and smoking are among the 4 major modifiable risk factors for NCDs globally.

Discussion & Conclusions

The population of Sri Lanka is among the oldest in the underdeveloped world, and it has one of the fastest aging populations in the world

A significant proportion of elders in the study population suffer from NCDs.

Given that Sri Lanka has just recovered from a 30-year- long civil war that halted the economic development of the country, the effects of increased longevity of its people with chronic NCDs pose distinct health challenges.

The reduction in NCD burden in the developed world is mainly due to two reasons: clinical interventions (screening and medical treatments) and primary prevention (such as smoking policies). Sri Lanka needs to focus on both aspects in controlling NCDs.

Modifiable risk factors of NCDs of the elderly such as physical inactivity that are related to lifestyle choices and are influenced by socio-economic development and urban living deserve more attention from healthcare policy makers.

Lack of social security coverage, deterioration of the traditional family support system for elders, and an existing health care system that has not paid much attention to the health care needs of the elderly have made the elderly vulnerable to poverty, deprivation of choice, and stigmatization.

Promotion of healthy and simple lifestyles and educating and motivating people to free themselves from unnecessary life bonds and luxuries would seem to be the most cost-effective and results-oriented health actions that would aid to minimize future burdens related to population aging in Sri Lanka.

Towards a healthy old age

Thanks