

Public Health Challenges for Ageing Populations

Professor Hafiz Khan, *PhD*
Professor of Public Health & Statistics

College of Nursing, Midwifery, and Healthcare
University of West London, UK
Hafiz.Khan@uwl.ac.uk

School of Medicine, University of Limerick, Ireland

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Outline

Background - understanding context of ageing populations




Unequal distribution of risks in later life

*Burden of disease
in old age*

*Financial security
in later life*

*Familial resources
for elderly care*

*Care workforce for
ageing populations*

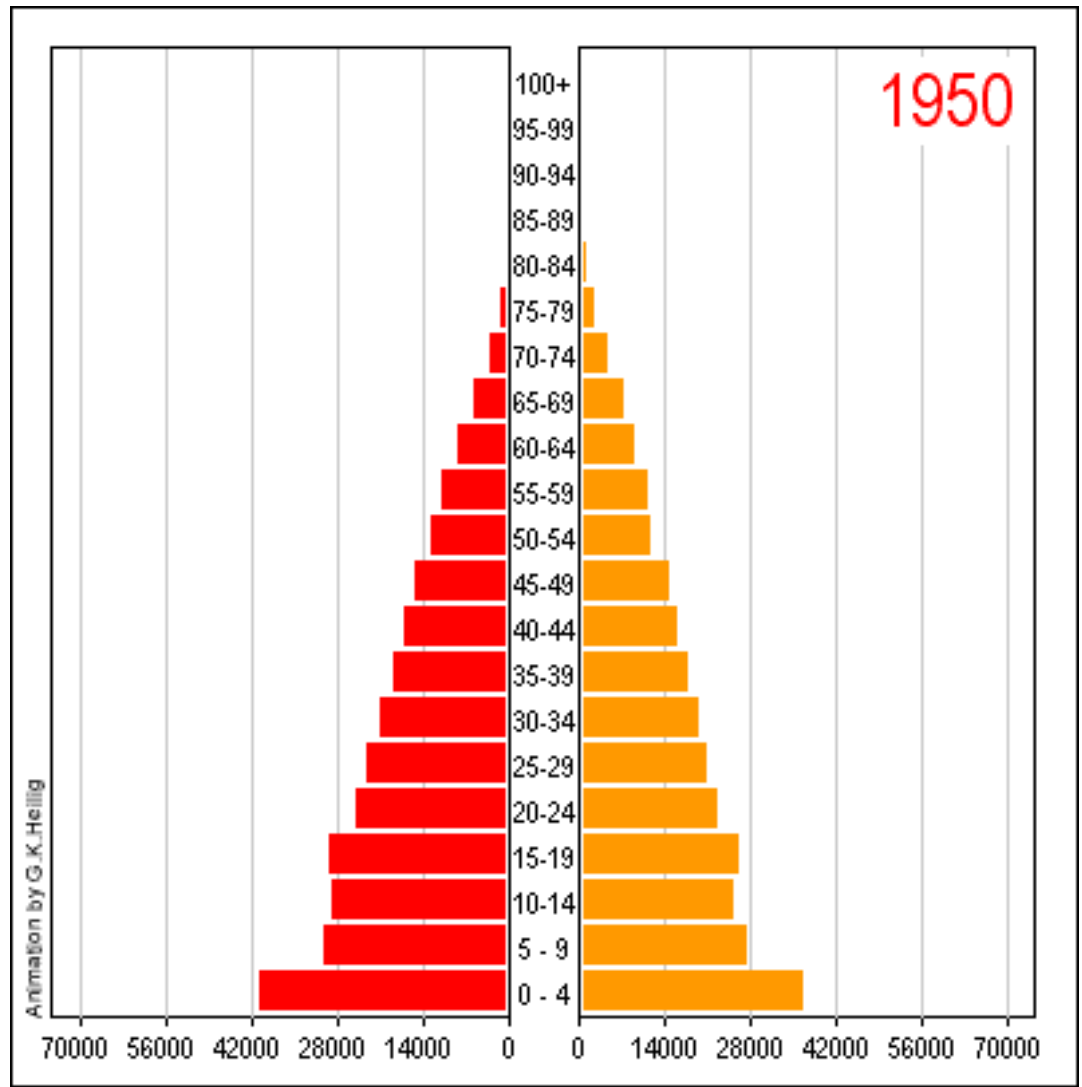


Some challenges ahead in geriatrics or geriatric medicine

World population

Year	Population (billions)
1950	2.5
2000	6.1
2050	9.7
2100	11.2

Change of population structure (China 1950-2050)



Projections of aging population

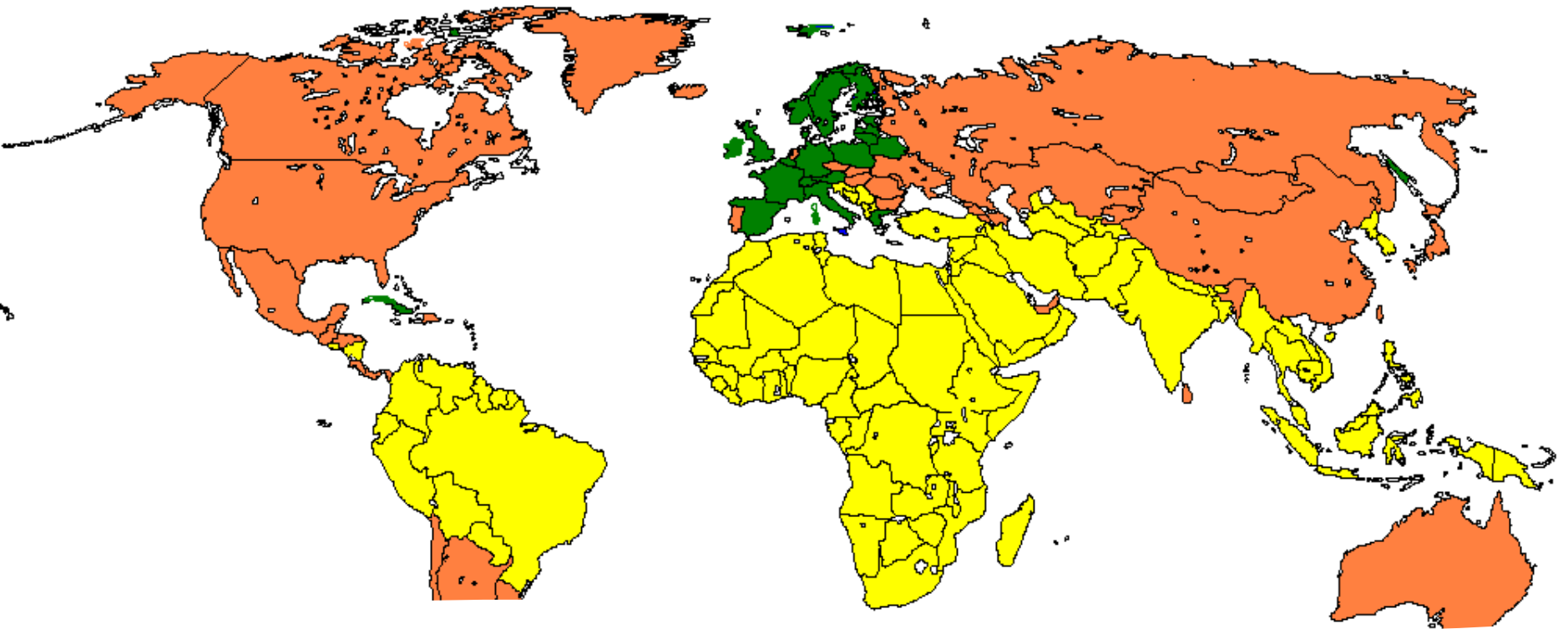
Population change is quite dramatic in many places.

The sheer number of older people is increasing faster than what we often thought.

By 2030,

A quarter of the population in Asia will be over 60 years.

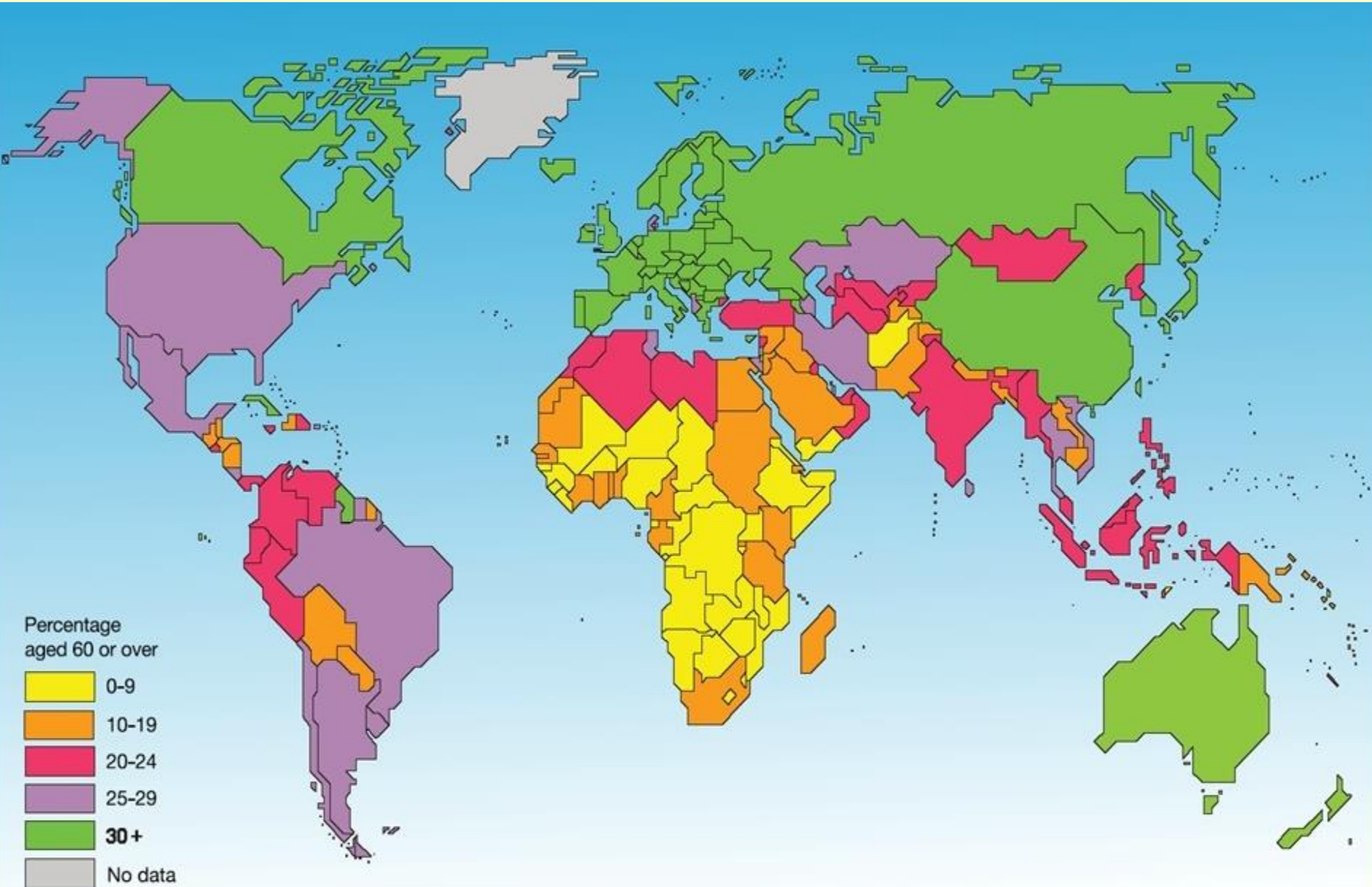
A quarter of the population of the developed world will be over 65 years.



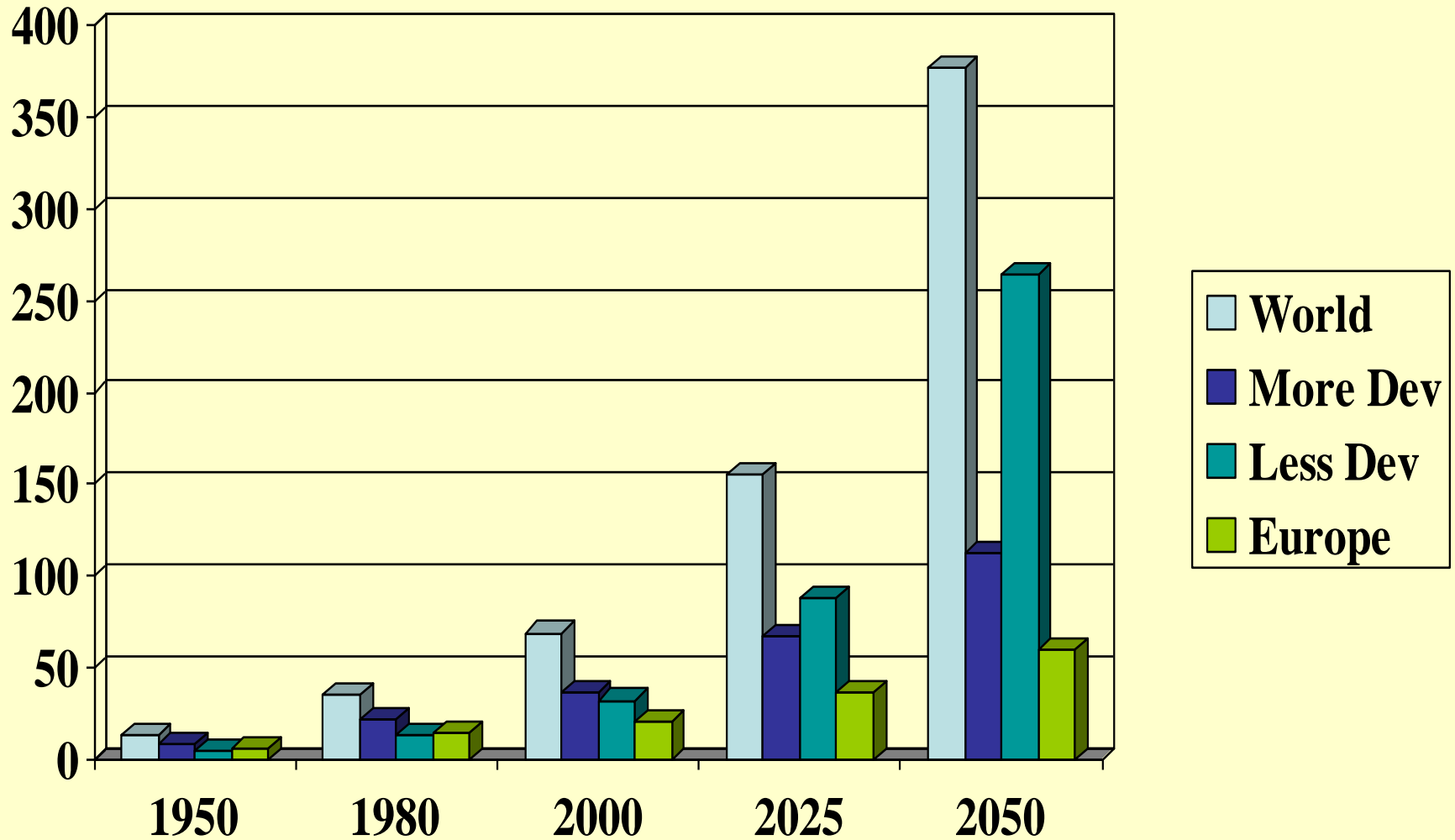
% of population aged 60+ years, 1996

- up to 10%
- 10 to 19%
- 20 to 24%
- 25 to 30%

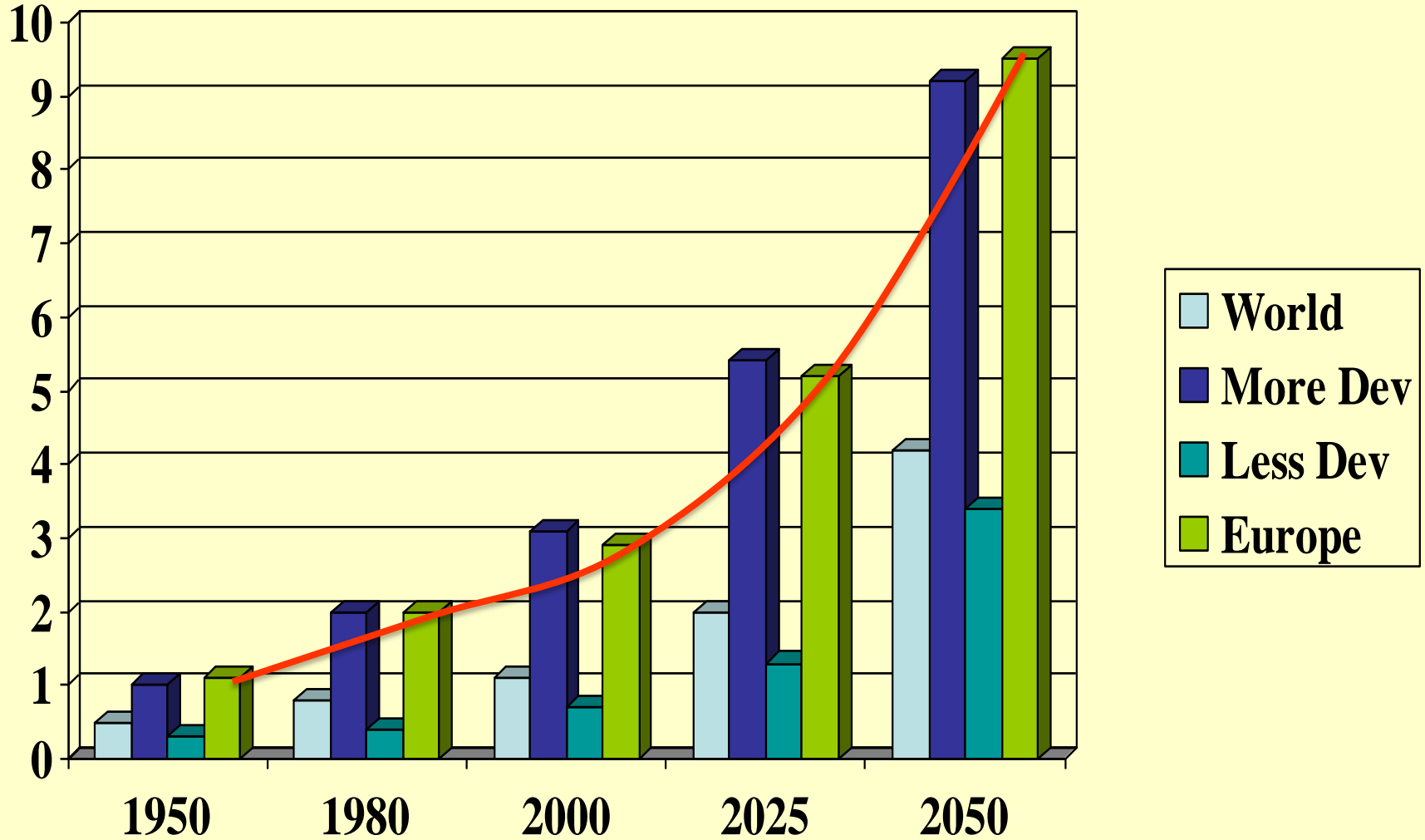
% of population aged 60+ years, 2050



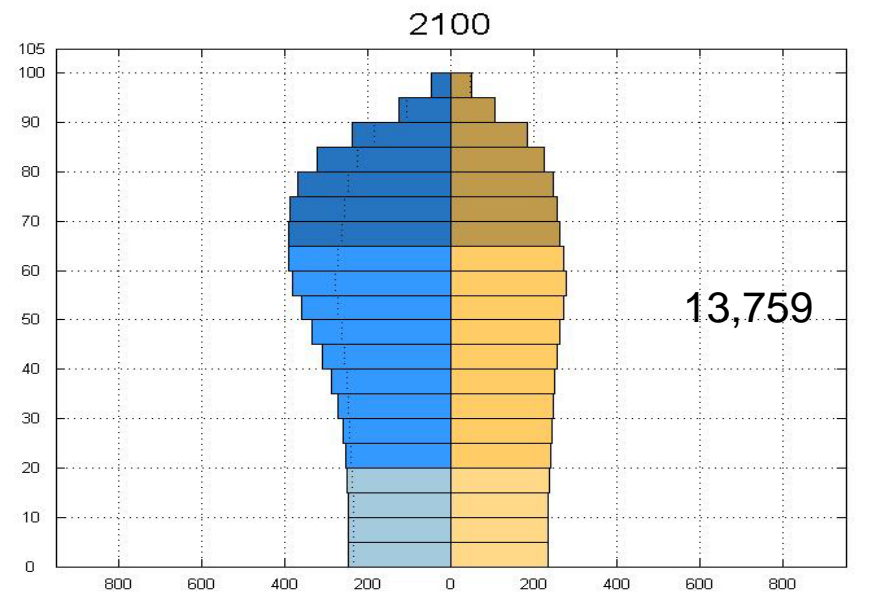
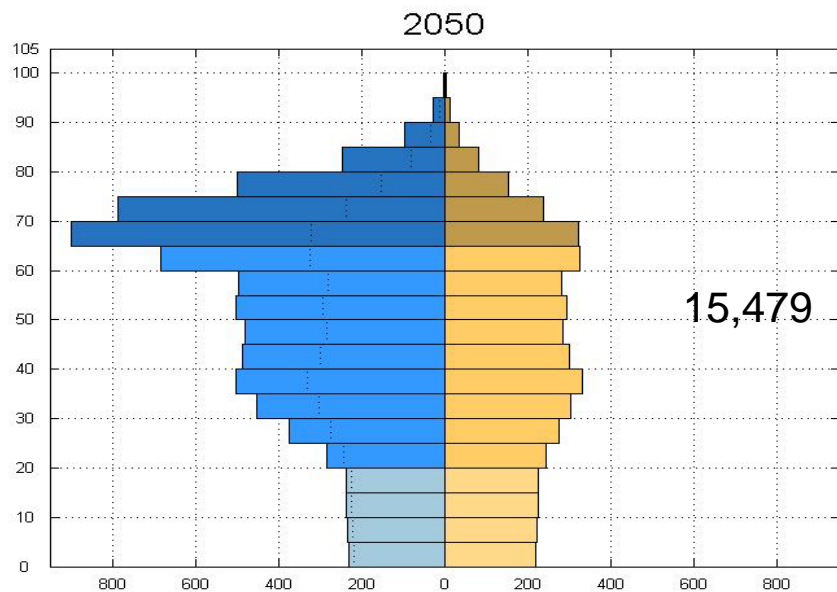
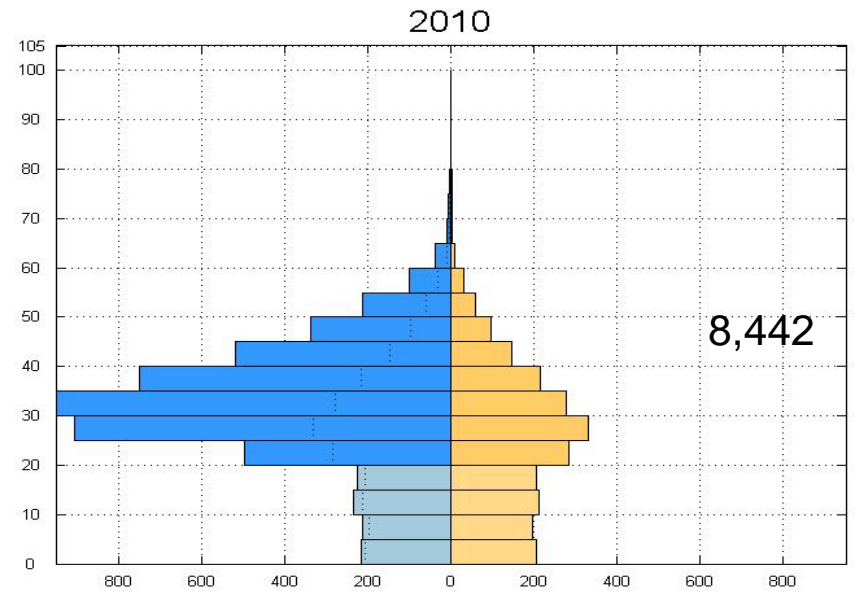
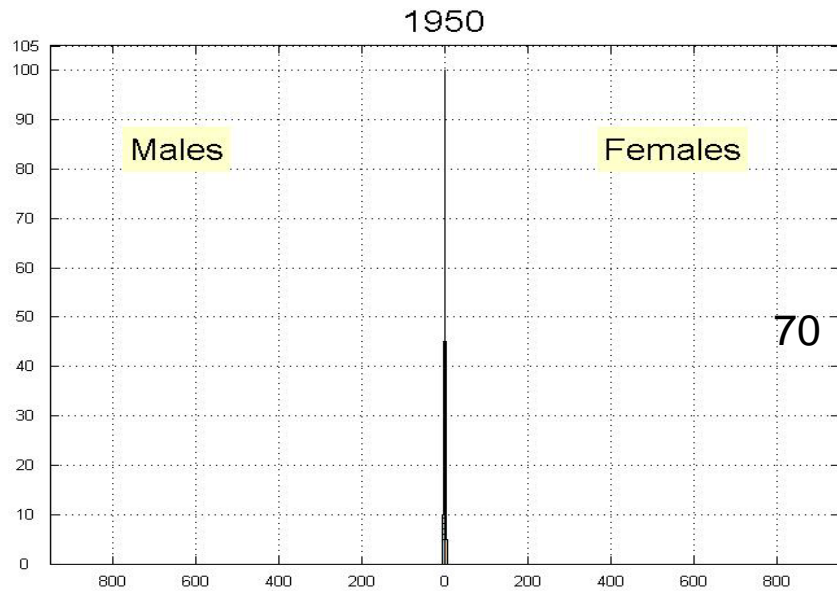
1950-2050 population 80+ (millions)



1950-2050 population 80+ %

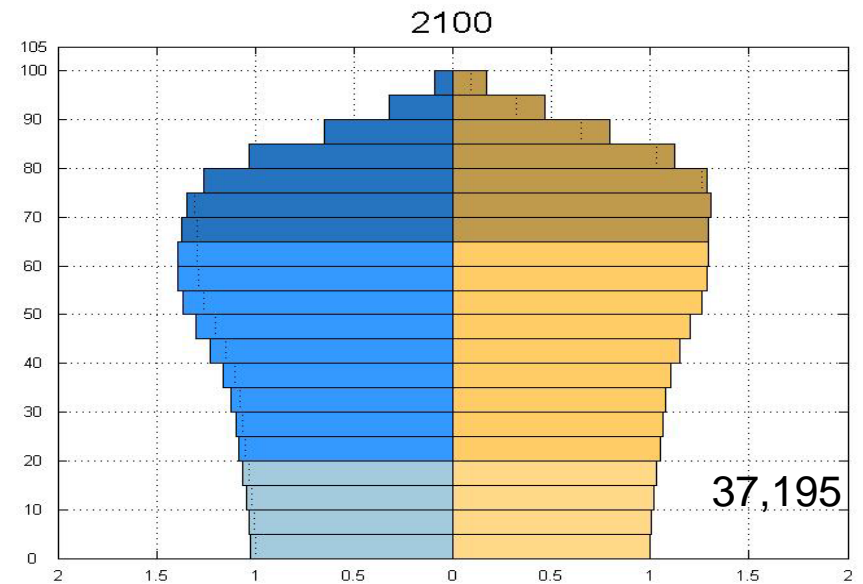
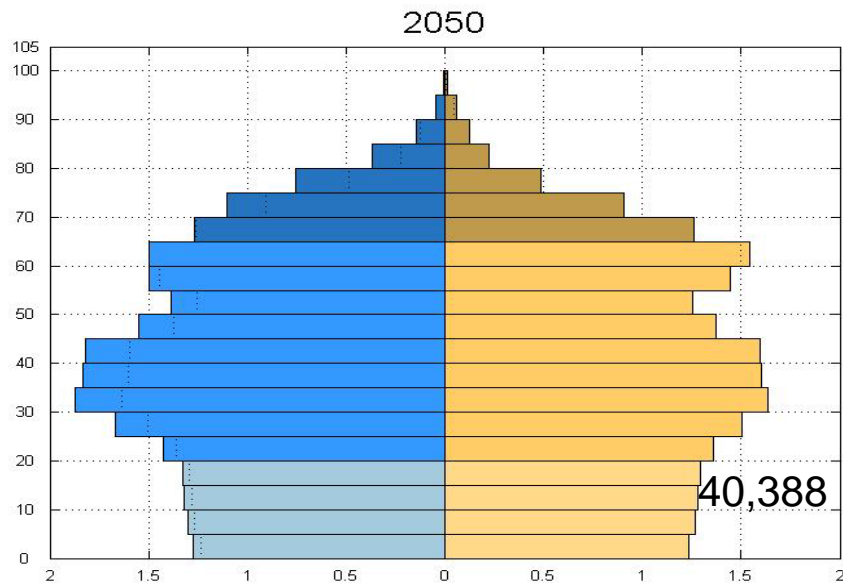
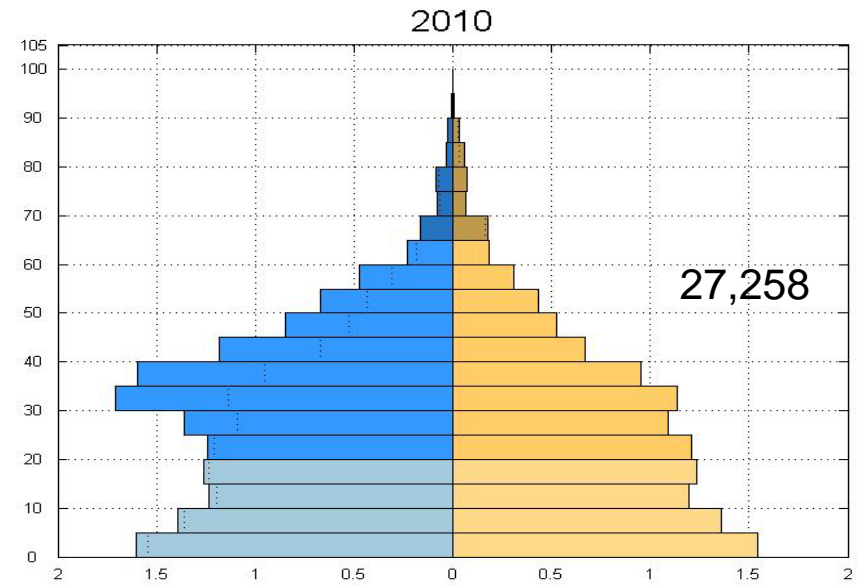
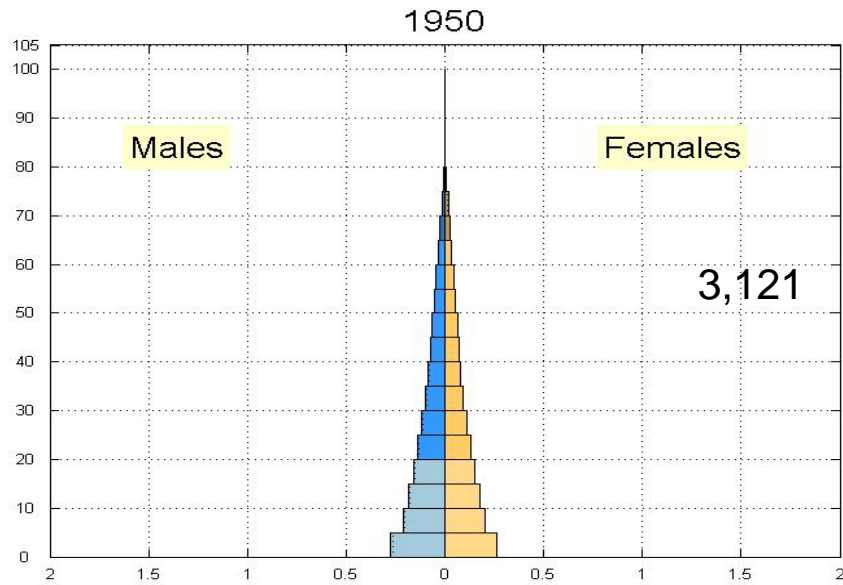


UAE: Population Distribution



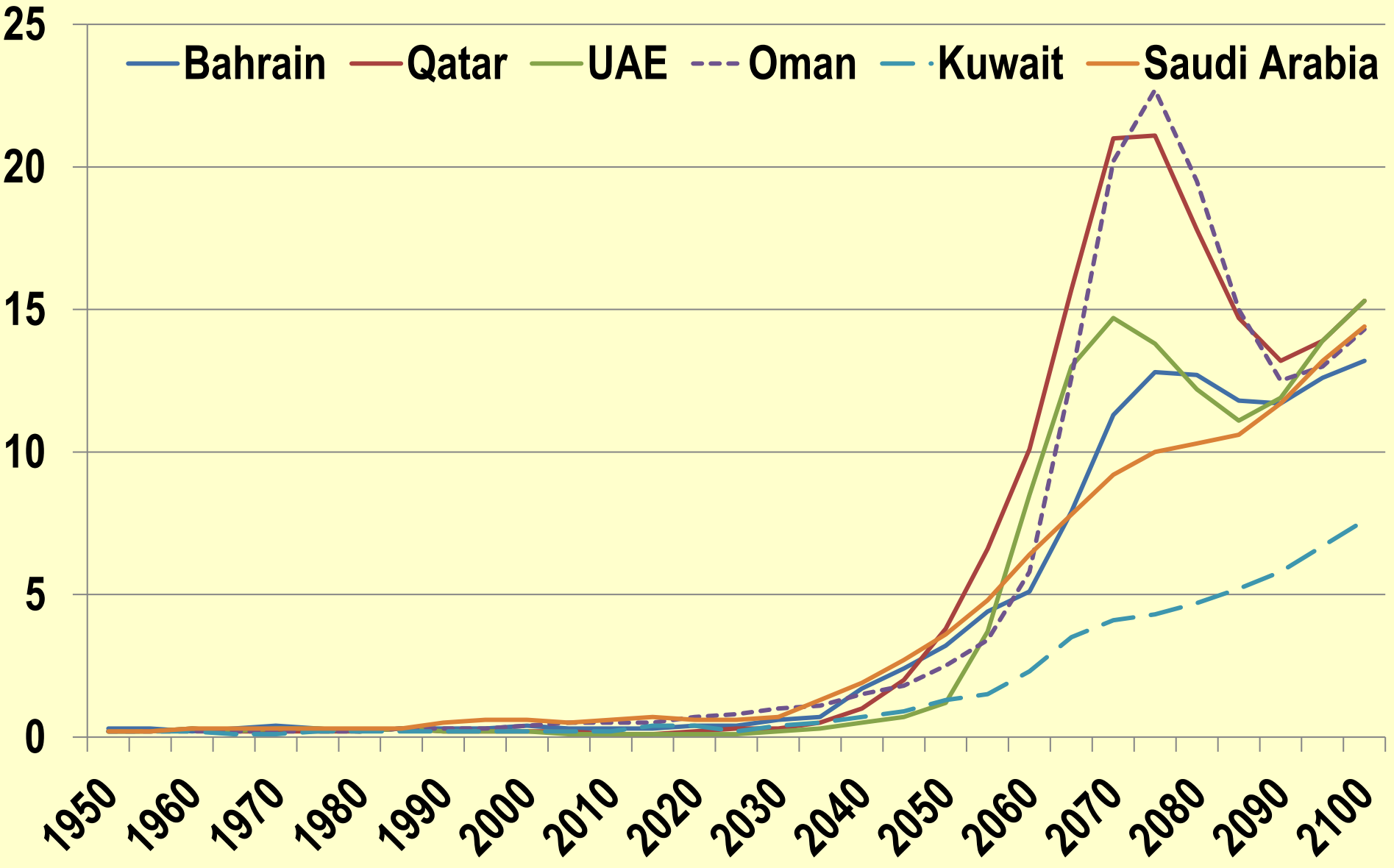
(thousands)

Saudi Arabia: Age-Sex Distribution

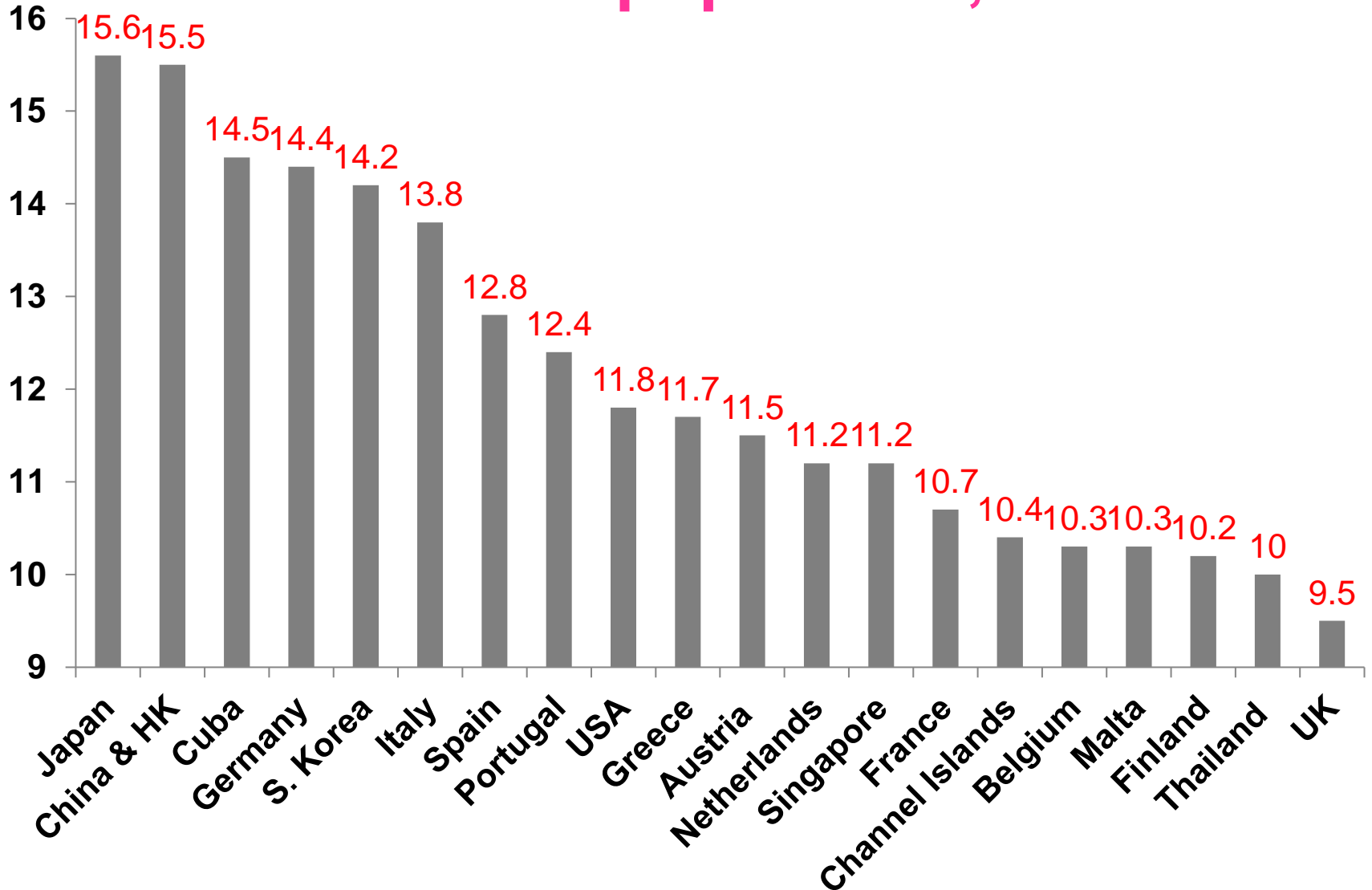


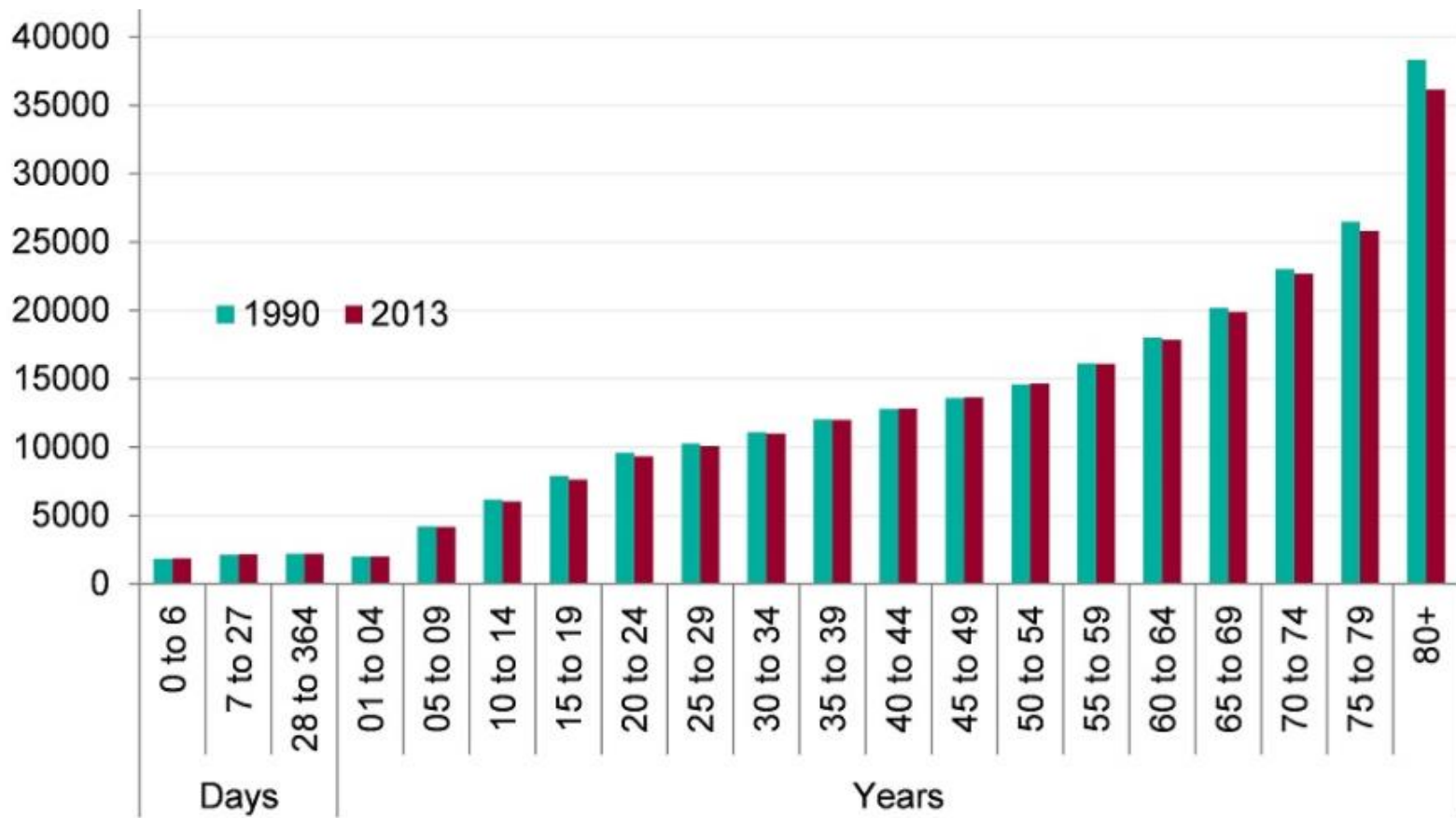
(millions)

% Population Aged 80+ Years



% 80+ population, 2050

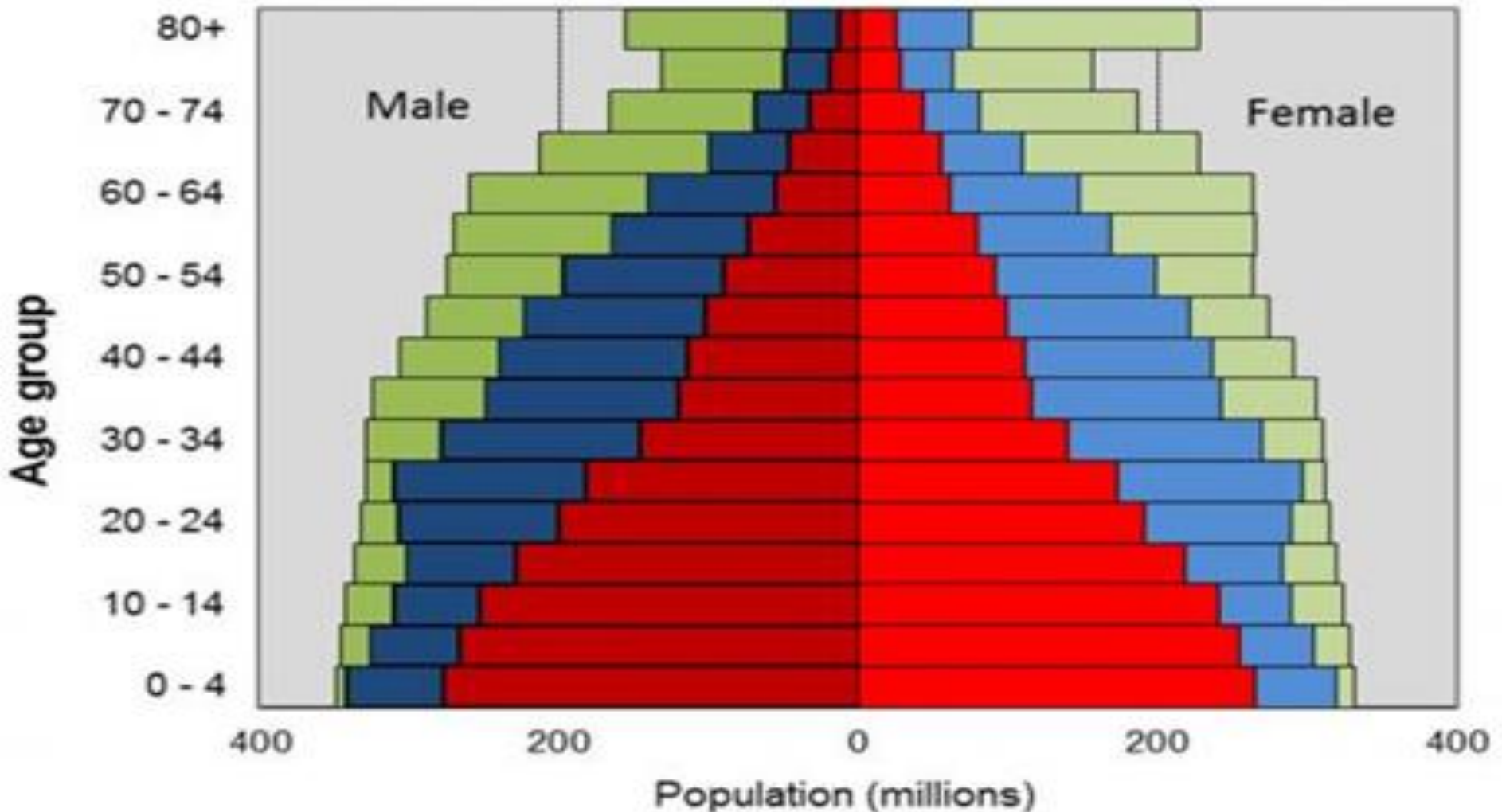


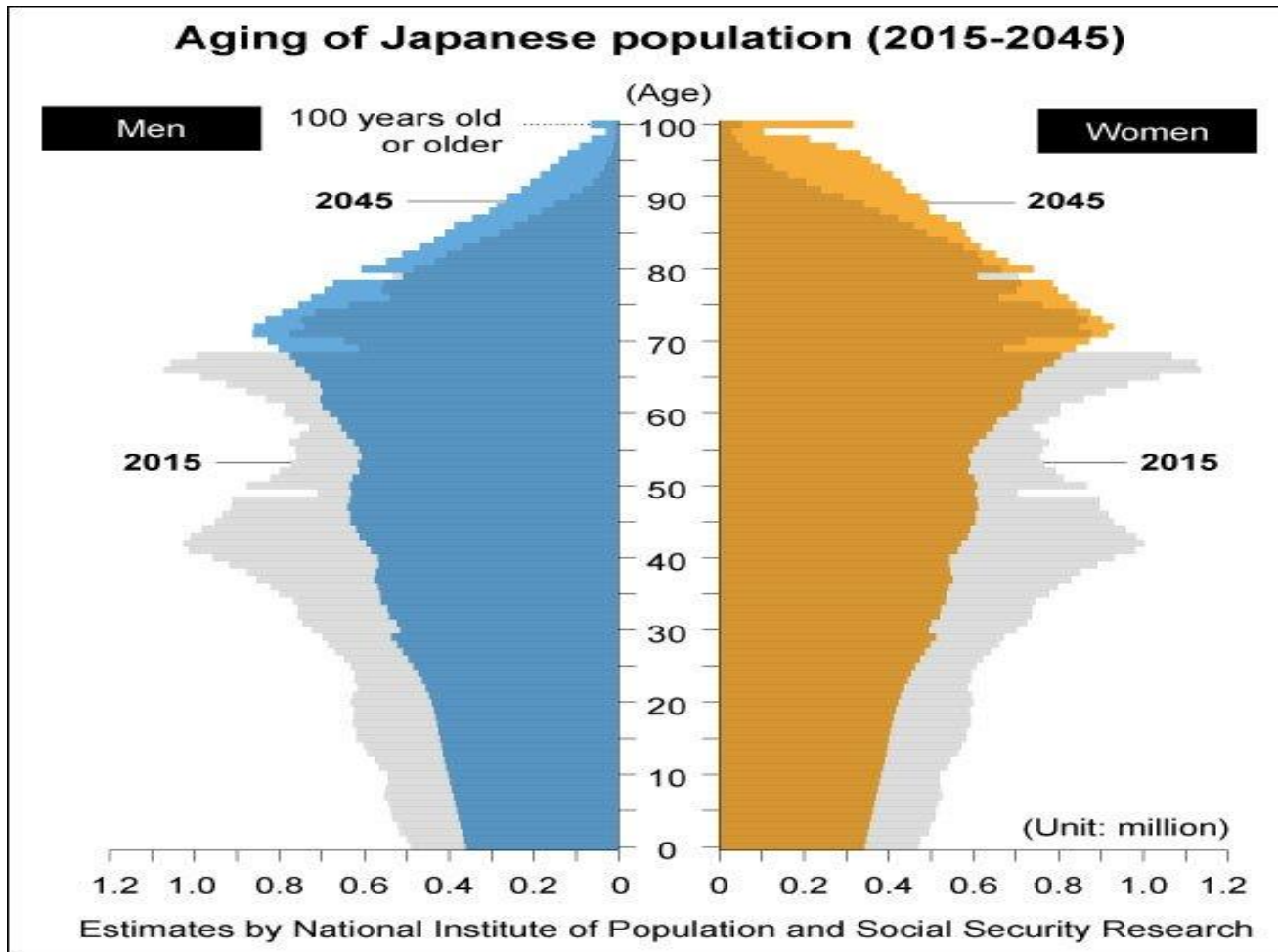


Years lived with disability per 100,000 population
(Public Health England, 2017)

Global ageing (1980-2050)

From pyramid 1980 to bell 2015 to barrel 2050





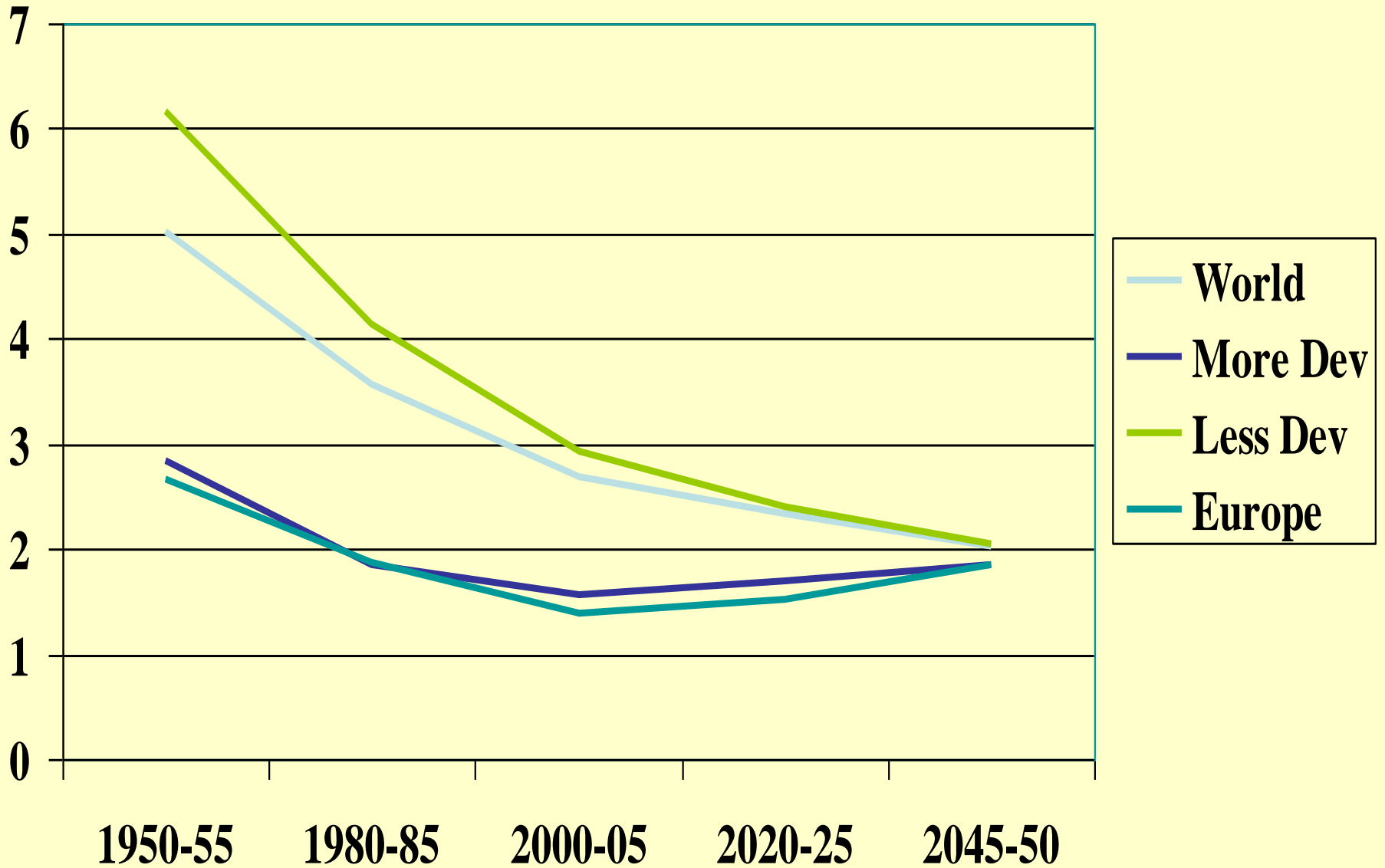
Japan - The super ageing society

Drivers of population ageing

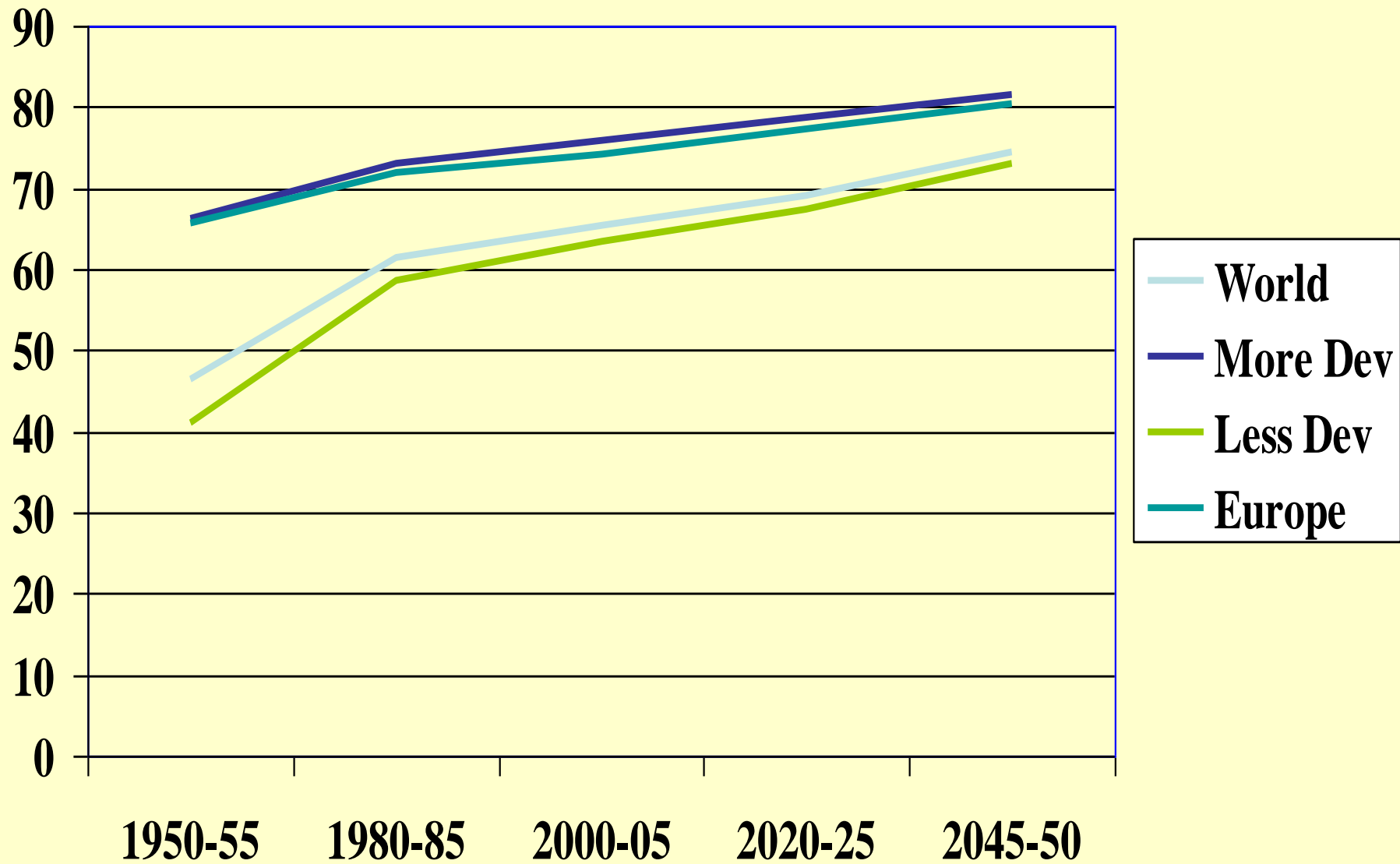
- Fertility
- Mortality
- Migration

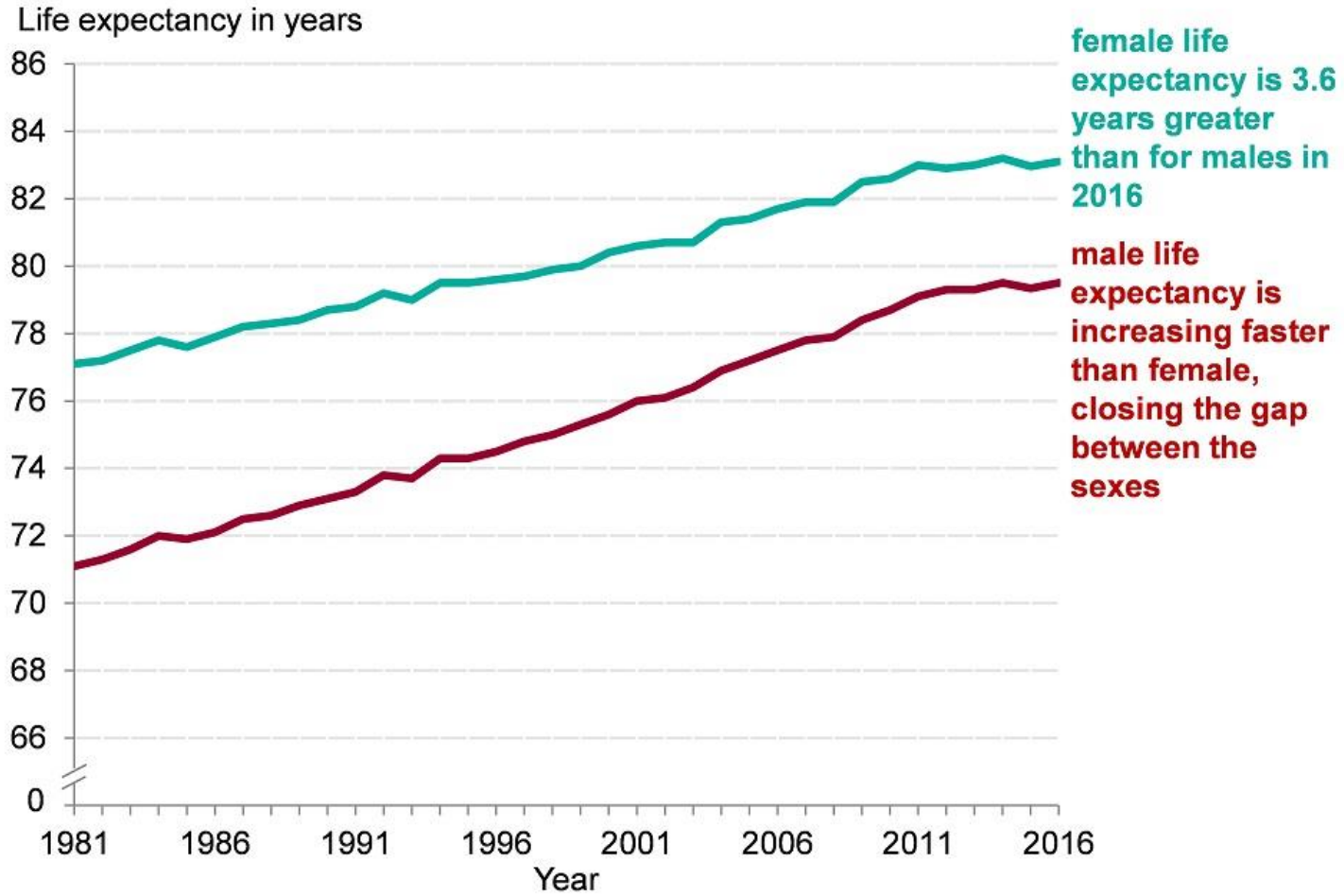


Fertility 1950-2050

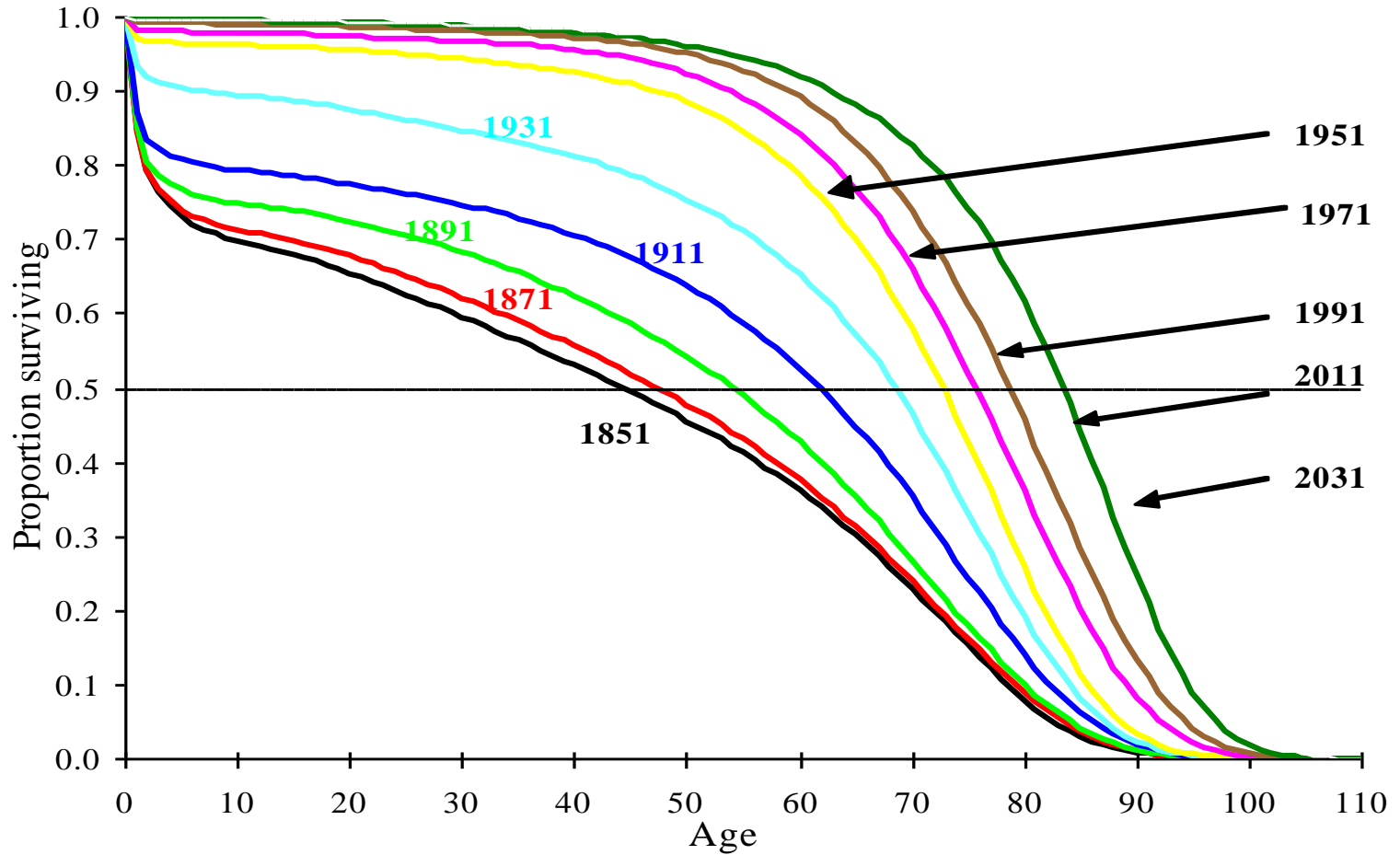


Life expectancy 1950-2050





Expectation of life at birth, UK



Proportion of persons surviving to successive ages, UK

The UK situation

Number of centenarians increase at a faster rate. The number *will reach some half a million by 2066.*

The prevalence of disability rises with age:

- 6% Children
- 16% Working age adults
- 45 % State pension age+

Currently over 11 million disabled people in the UK (18%), costing around £80 billion per annum.

Proportion of life spent in poor health at age 65, England (2013 - 2015)

	At birth Males	At birth Females	At age 65 Males	At age 65 Females
Life expectancy	79.5	83.1	18.7	21.1
Healthy Life expectancy	63.4	64.1	10.5	11.2
Number of years in poor health	16.1	19.0	8.2	9.9
% of life in poor health	20.3	22.9	43.9	46.9

Migration

- Migration plays an important role.
- It can slow down the process of ageing.
- Uncertainty in future migration.

Net annual migration, years to 2050 UN projections

Region	Net annual migration assumed for UN projections
Asia	-1,200,000
Latin America & Caribbean	-750,000
Africa	-400,000
USA & Canada	+1,300,000
Europe	+850,000
Australia	+100,000

Global trends in population ageing

- Population ageing is unprecedented –
*the 21st century will witness rapid ageing
than ever before.*
- Population ageing is pervasive –
*a global phenomenon will affect everyone.
Countries that started the process later will
have less time to adjust.*
- Population ageing is enduring –
*we will not return to the young populations
anymore that our ancestors knew.*

Key risks of global ageing

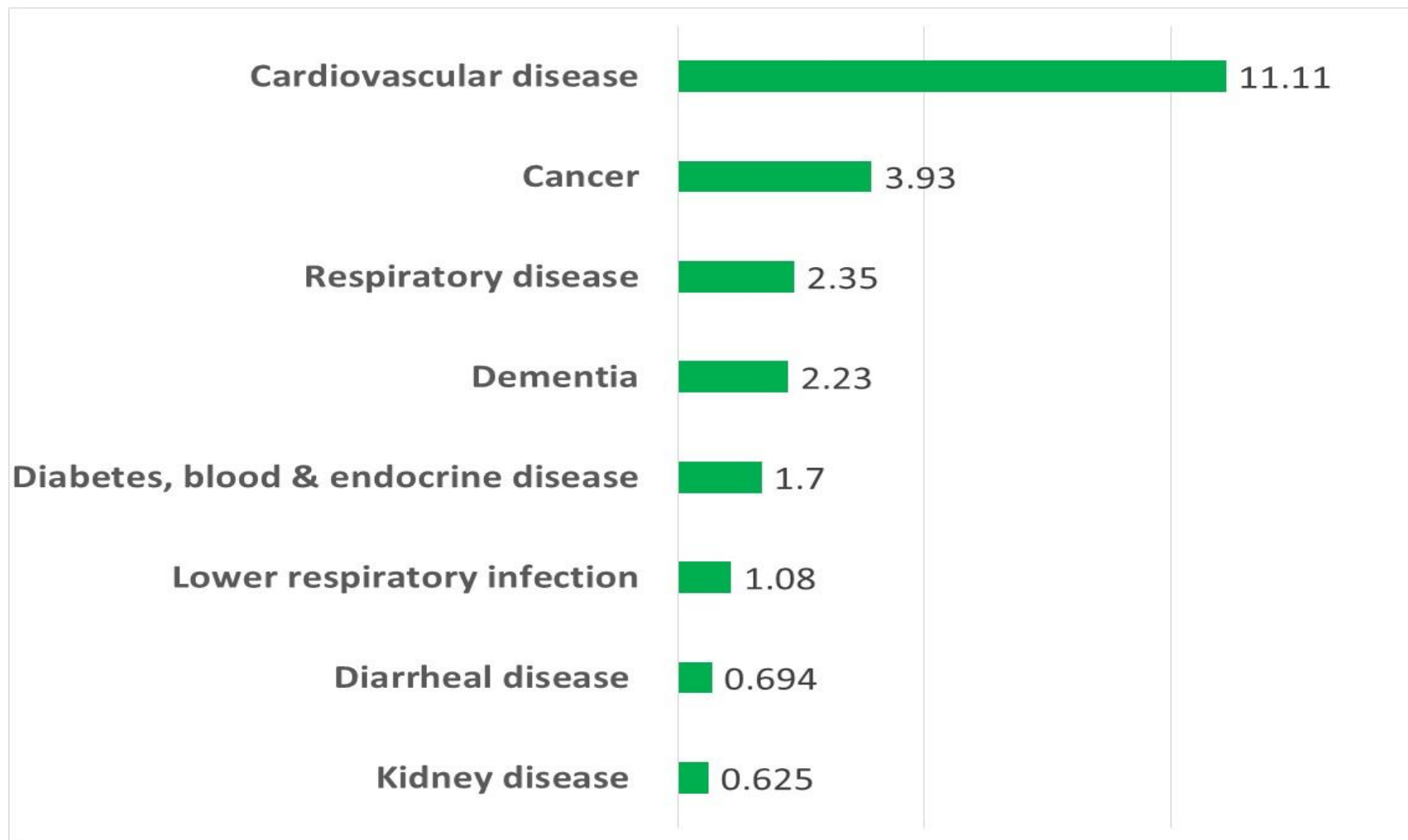
What are the key challenges of global ageing with regard to the way it shapes our lives?

- Burden of disease in old age
- Financial security in retirement
- Familial resources for elderly care
- Care workforce for elderly

Burden of disease

- Epidemiological transition – changes in leading causes of deaths from acute and infectious diseases to chronic and non-communicable ones.
- Non-communicable diseases are big threats such as Heart disease, Stroke, Cancer, Diabetes and Dementia.
- These are also linked with disability, dependency & long-term care needs.
- Highly likely to suffer from multi-morbidities.

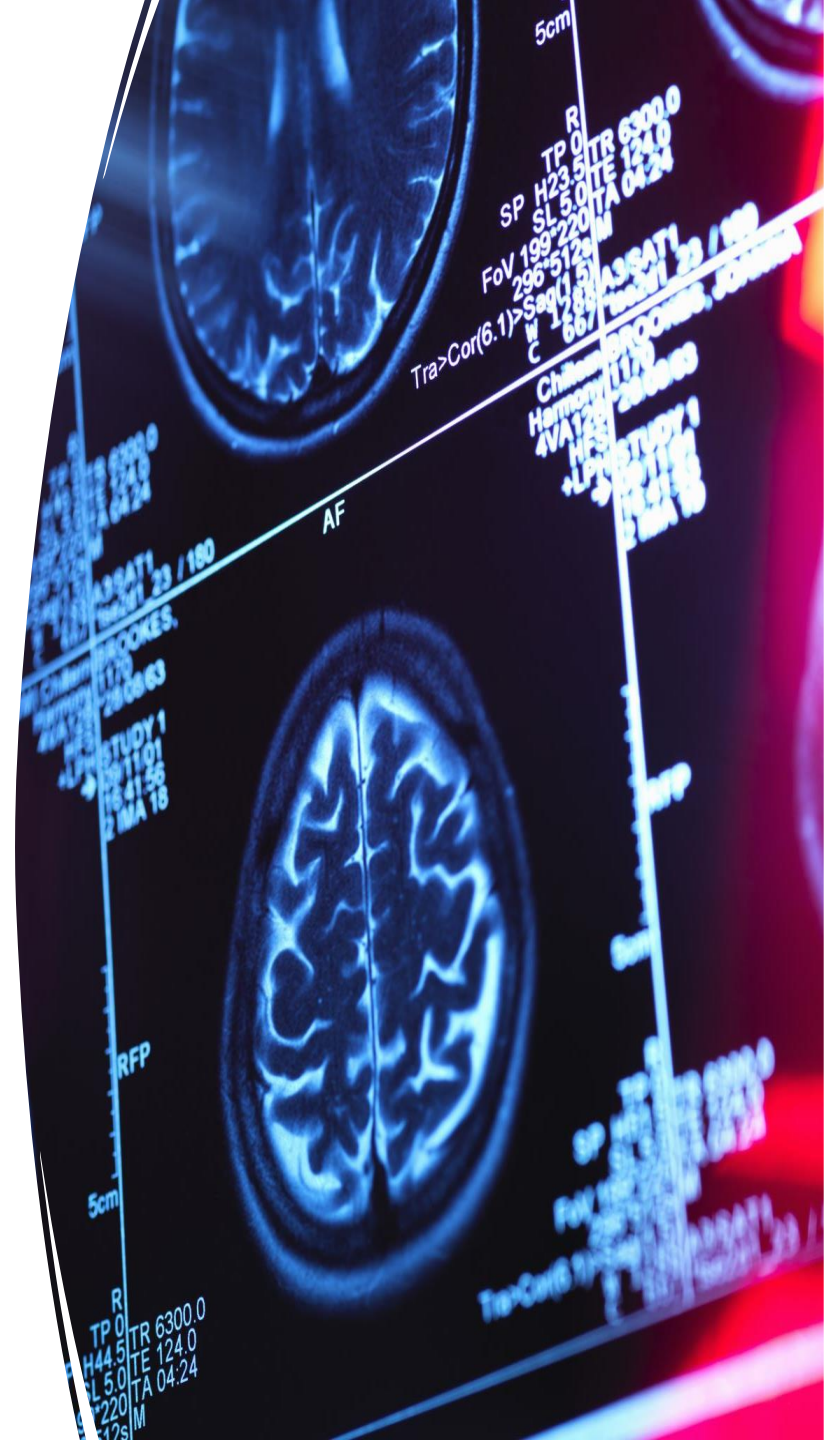
Causes of deaths in adults 70+ years, World 2016 (millions)



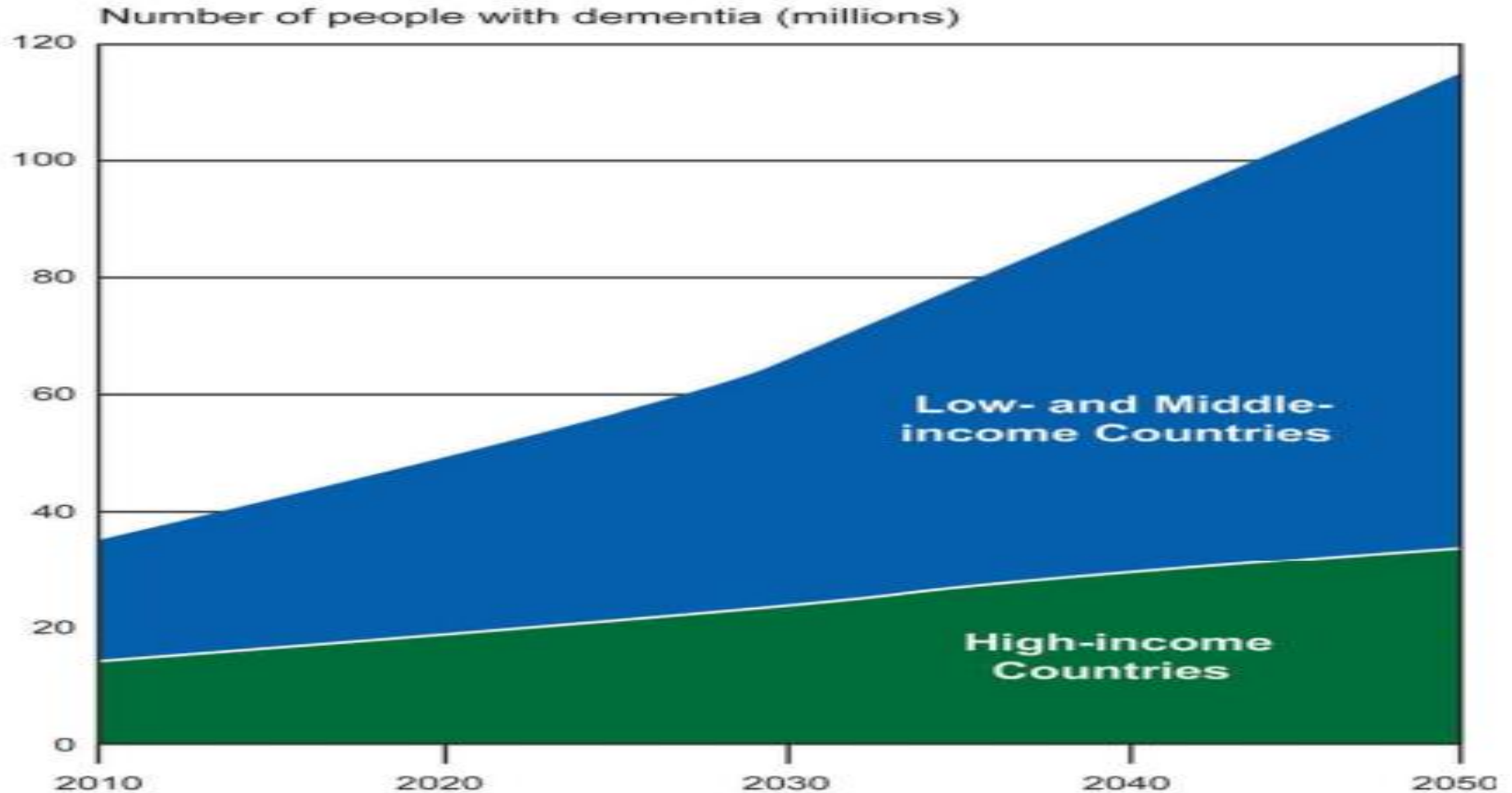
Common Geriatric Conditions

Age-Related medical conditions & illnesses

- Arthritis.
- Cancer.
- Chronic Kidney Disease.
- Chronic Obstructive Pulmonary Disease.
- Dementia, Alzheimer's Disease, and Parkinson's Disease.
- Diabetes.
- Osteoporosis.
- Stroke.



Global scenario of dementia



Increasing demand for care

- Rapid growth in the number of the oldest old
- More and more experience of multimorbidity, disability and dependencies
- Obesity and complex health in old age
- An estimated 35.6 million people lived with dementia (2010) – this is projected to double every 20 years, reaching 115.4 million in 2050
- Increase in labour force participation by women & growing migration

Burden of disease

Ageing + Complex multi-morbidities = Double burden for carers

- Think of how this becomes a big challenge for global public health
 - pressure on global financing of care under austerities
 - reduced quality of life for the elderly
 - diversion of resources from other health improving investments

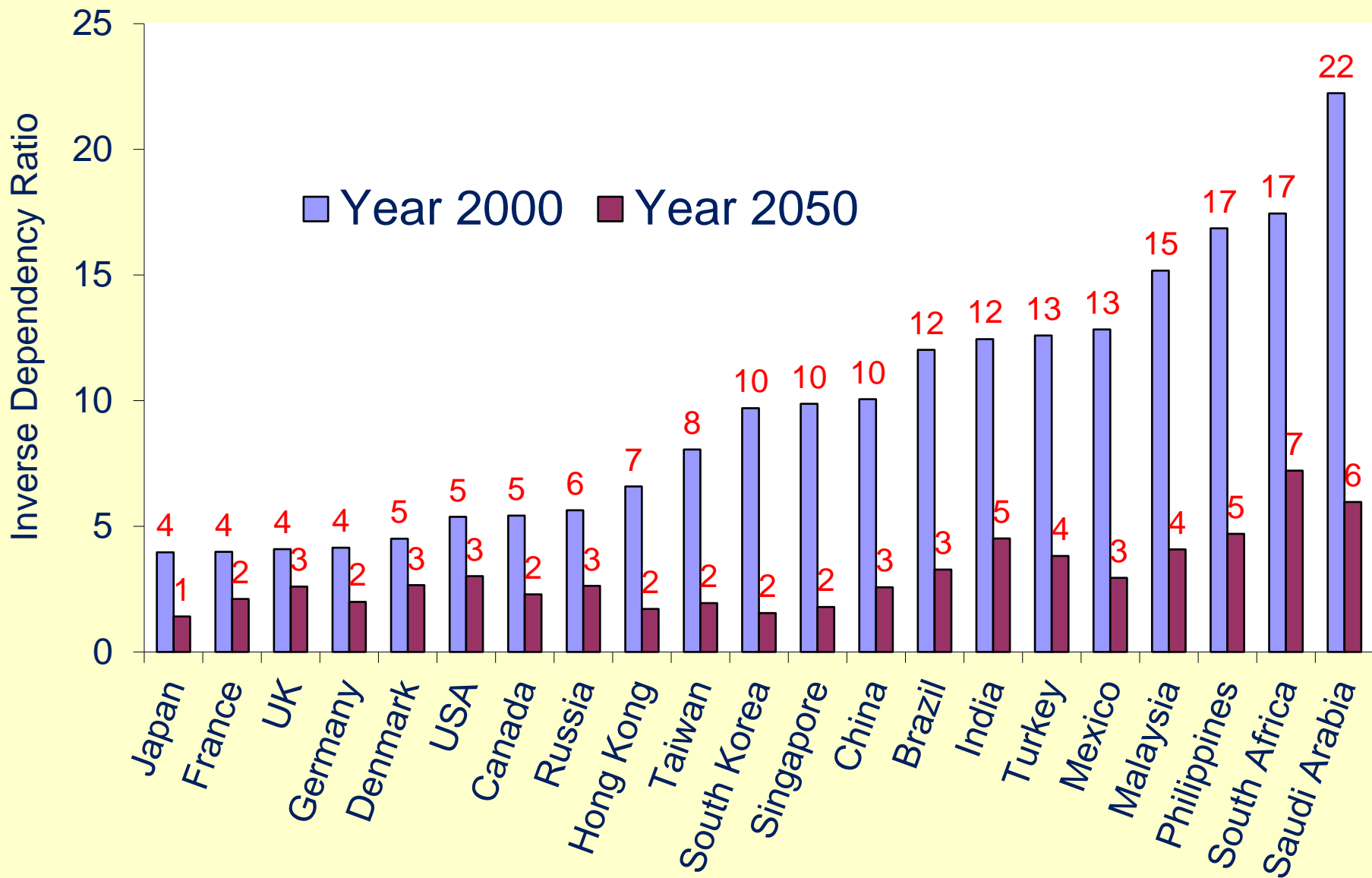
Example: Cost of care in Japan

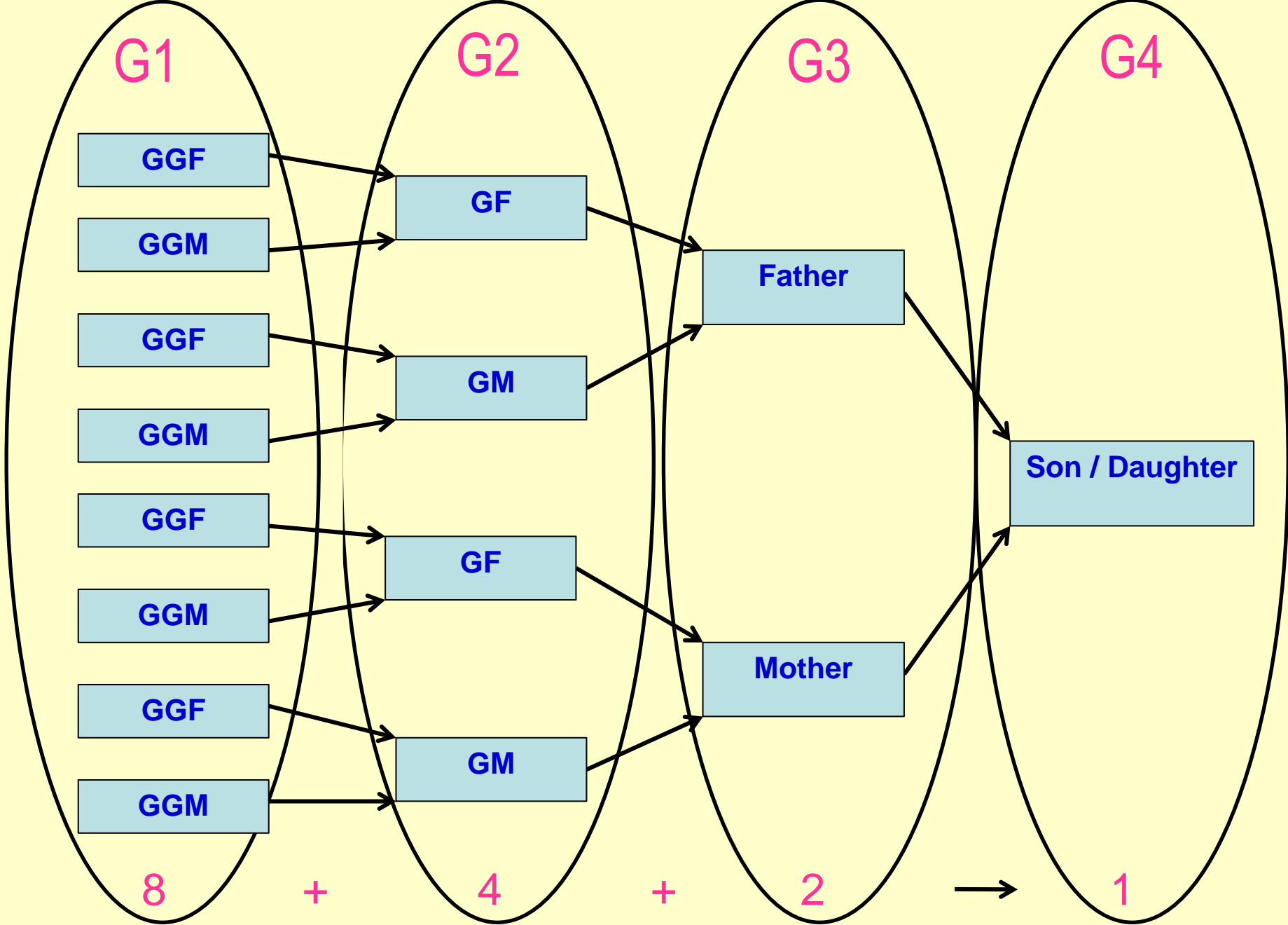
- The increase in the number of elderly people will put a strain on costs for medical and nursing care services.
- Medical service costs for people aged 75+ run to average of £6,090 per year.
- Nursing care service costs for people aged 75+ works out an average of £3,572 a year.
- Total annual cost per person aged 75+ is £10,000.



- Traditionally, covering cost of elderly care was part of family responsibility.
- Is it sustainable any more? If not,
 - Who is going to pay the cost of care in old age?
 - Is it the Individual, or the Family, or the Government?

Persons aged 15-64 years to support per 65+





The current generation (G4) may need to take care of max of 14 people

Care burden

- New generation has an increasing care responsibility.
- Care responsibility usually shared by siblings within families.
- The lower the number of sibling the higher degree of care responsibility goes to them.
- Childlessness in the household may be a big concern for future care provision.

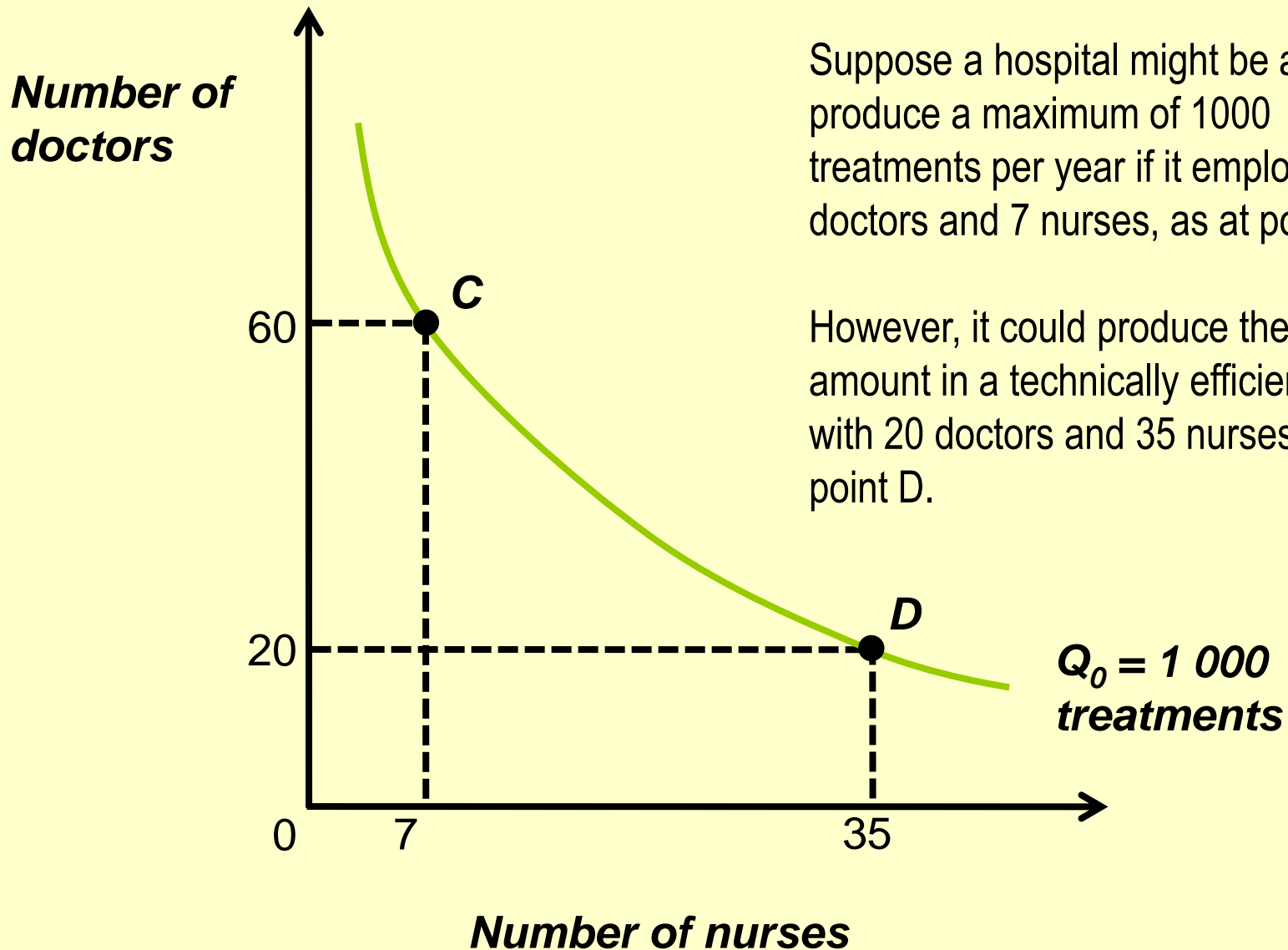
Healthcare workforce for elderly

Healthcare workforce include doctors, dentists, nurses as well as a host of allied health professionals involved in the healthcare.

Growing demand for adequate number of care workforce for ageing population.

Production of healthcare workforce for treatment.

Production Function for healthcare workforce



Suppose a hospital might be able to produce a maximum of 1000 treatments per year if it employs 60 doctors and 7 nurses, as at point C.

However, it could produce the same amount in a technically efficient way with 20 doctors and 35 nurses, as at point D.

Why this matters

Long-term chronic illness and the need for long-term care have major impacts on

- individuals and households
- psychological stress – for older people and caregivers
- economic burden – producers become consumers of care

Societies and economies

- loss of productivity, lost development

Challenges



Lack of financial support to bear the cost of care



Need an affordable care system in most part of the world



Engage various stakeholders in the geriatric care



Need political commitment and support



Appropriate regulatory approaches



Multiple morbidities; need for integrated action

Concluding remarks

- The ageing population is obvious globally due to population changes.
- Health risks will dominate the later part of life.
- There will be a demand for healthcare facilities and its cost of care issues for older people.
- There should be an urgent need of geriatric care system in every country in the world.
- Many challenges are coming ahead in relation to care and support to elderly and ignoring these could undermine the potential benefits of living longer.

Professor Hafiz Khan

<https://www.uwl.ac.uk/staff/hafiz-ta-khan>

Question & Answer