

# Geriatric Health

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# Objectives

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- Differentiate between Geriatrics and Gerontology
- Describe physiological and pathological aging
- Understand health problems of elderly globally
- Explain the demographic changes associated with ageing of the population
- Discuss existing Global programs for elderly care

# Introduction

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**"You do not heal old age. You protect it; you promote it; you extend it",**

Sterling Ross

- Gerontology - the study of the physical and psychological changes which are incident to old age.
- Geriatrics - the care of the aged is called clinical gerontology or geriatrics.



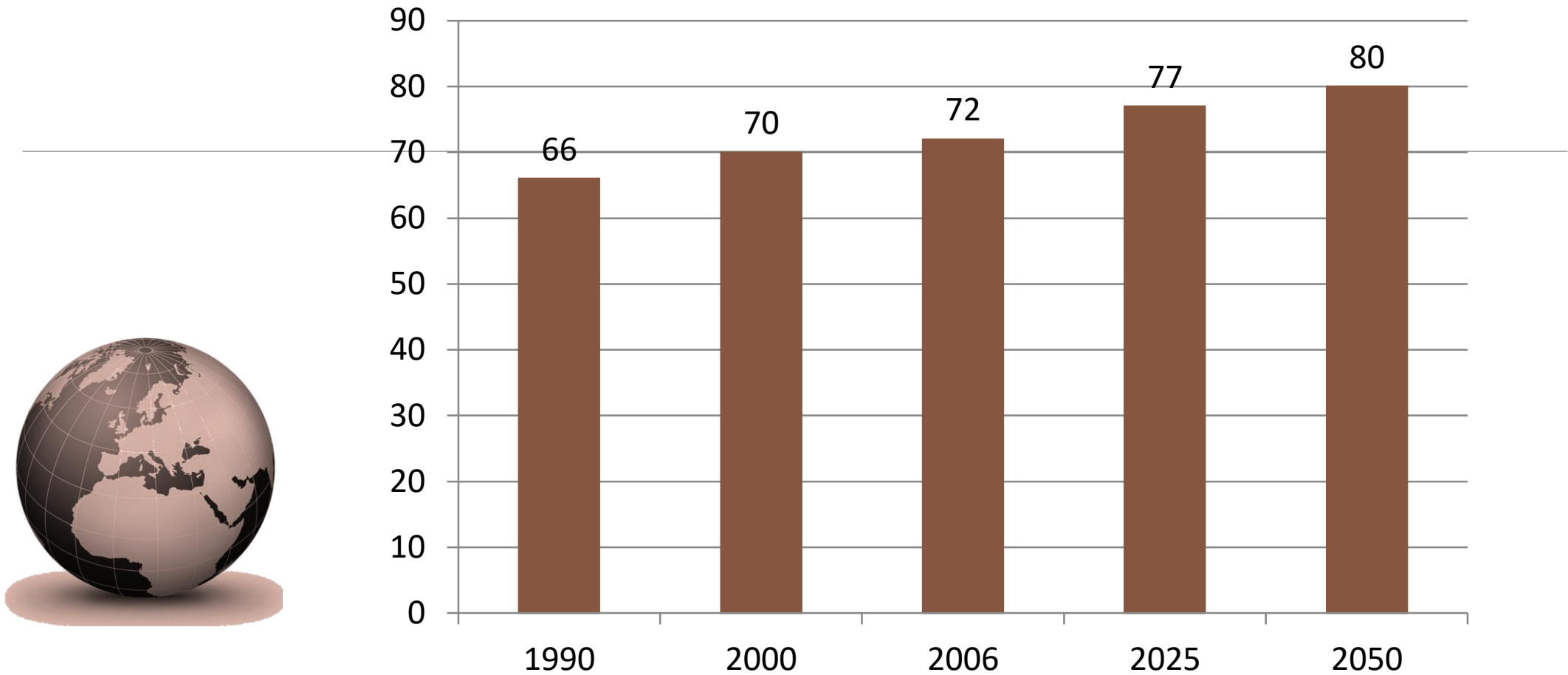
# CLASSIFICATION OF ELDERLY POPULATION

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Classified into

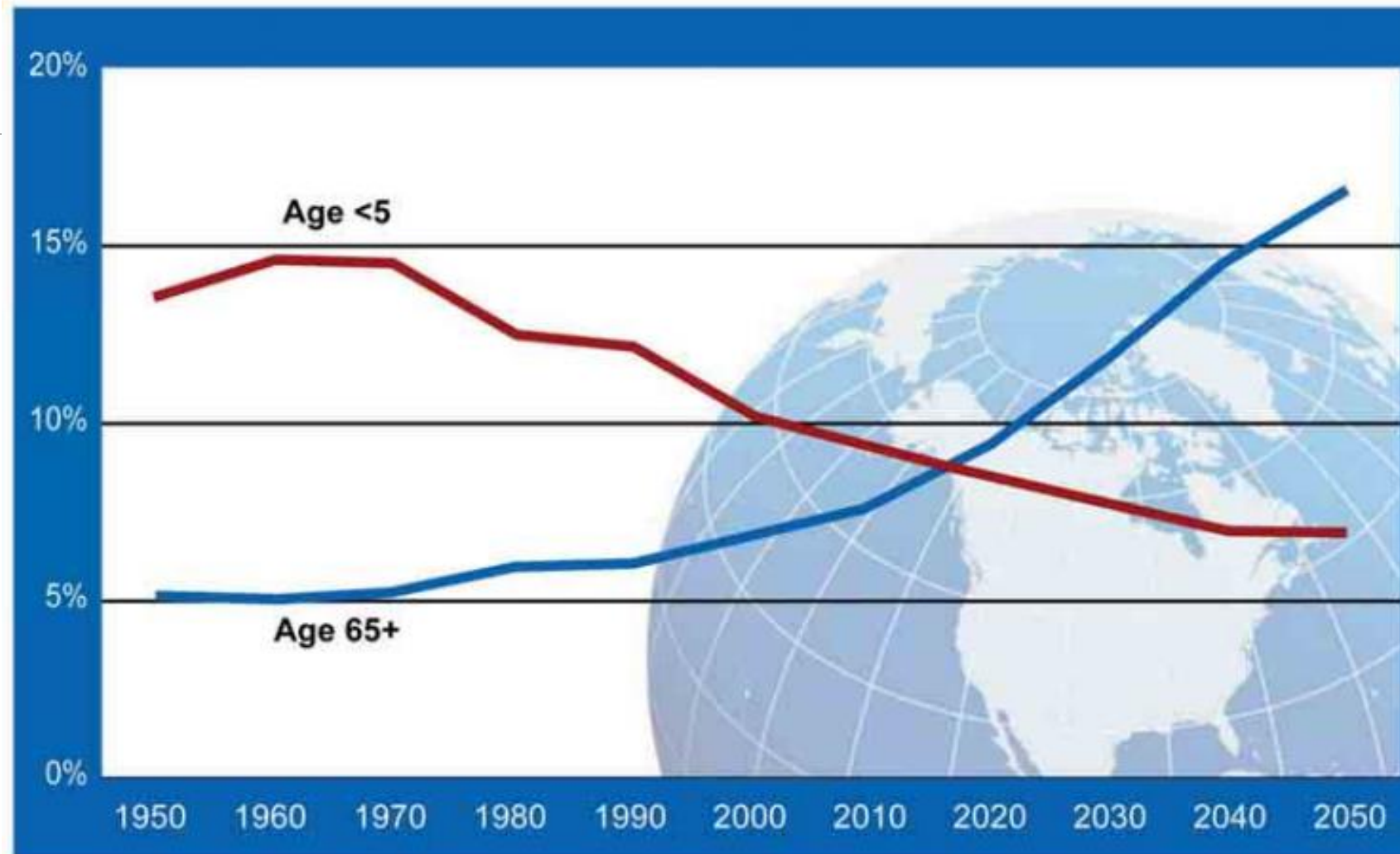
1. Young old (60 to less than 75 years)
2. Old (75 years to less than 85 years)
3. Oldest old (85 years and above)
4. Frail elderly (above 60 years with cognitive impairment or a disability)

## Life expectancy at birth (in years)



About 1.2 billion people over the age of 60 expected to be in 2025 and this number will raise to reach 2 billion by 2050; 70% will be living in low and middle income countries.

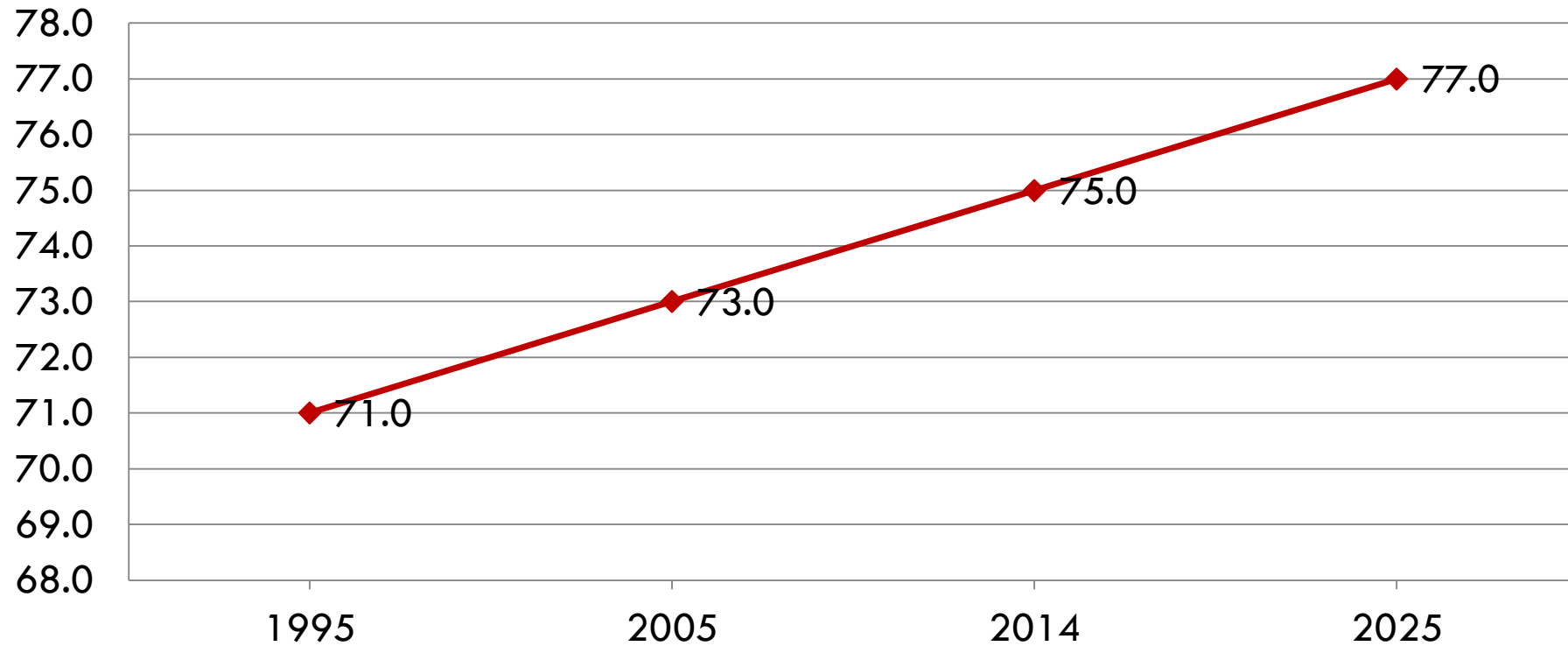
## Young Children and Older People as a Percentage of Global Population: 1950-2050



Source: United Nations. *World Population Prospects: The 2010 Revision*.  
Available at: <http://esa.un.org/unpd/wpp>.

# LIFE EXPECTANCY AT BIRTH, KSA

Years

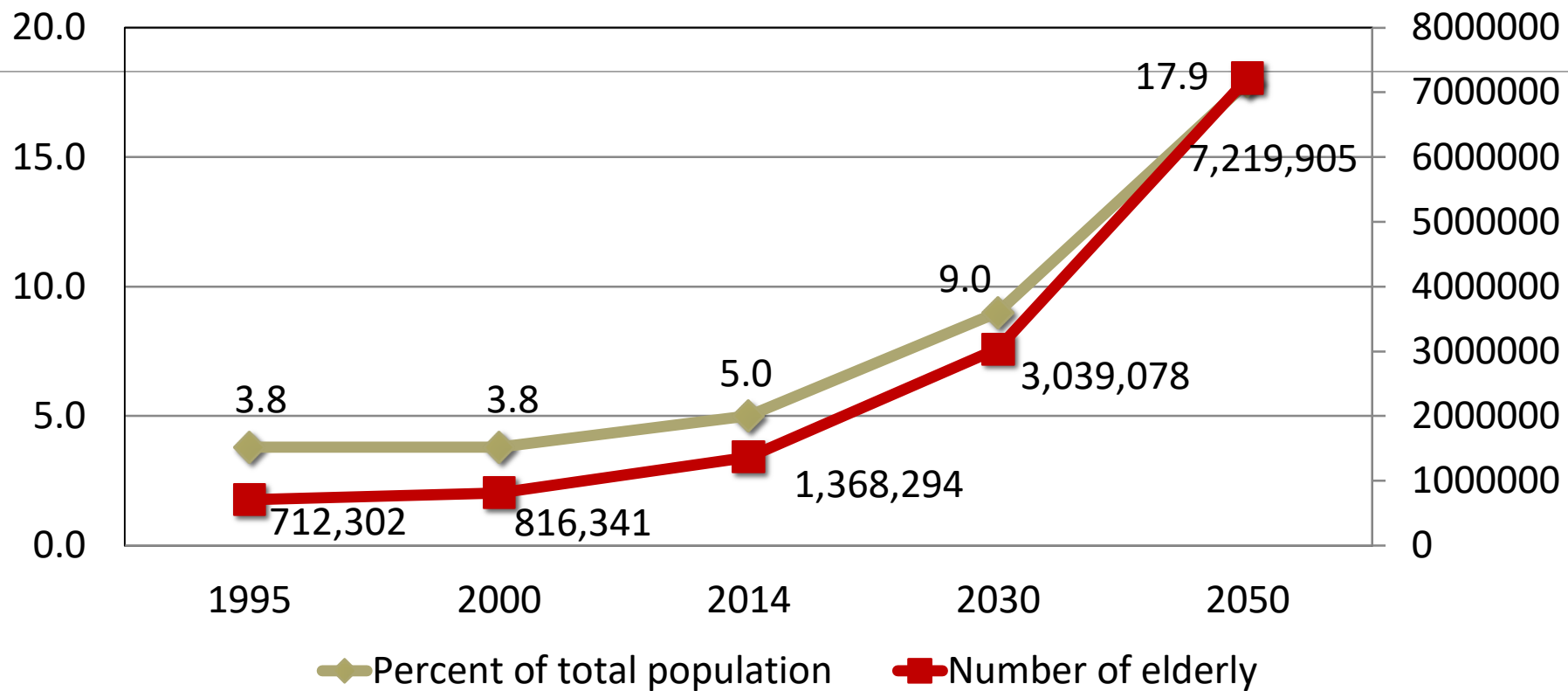


Source: Ministry of Economy and Planning, Central Department of Statistics and Information

# Percentage & number of the elderly (60+ years), KSA

Percent of total population

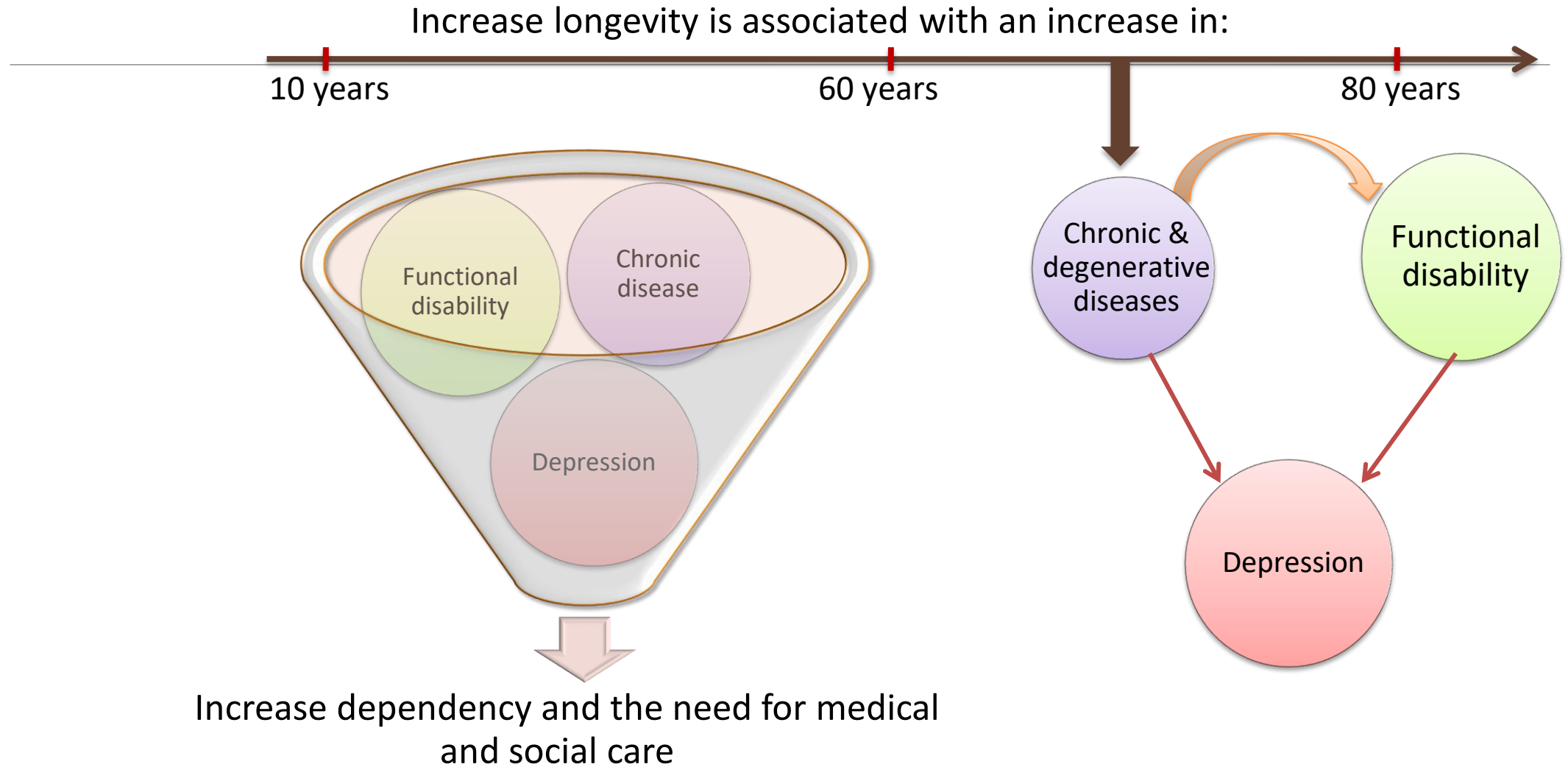
Number of Elderly



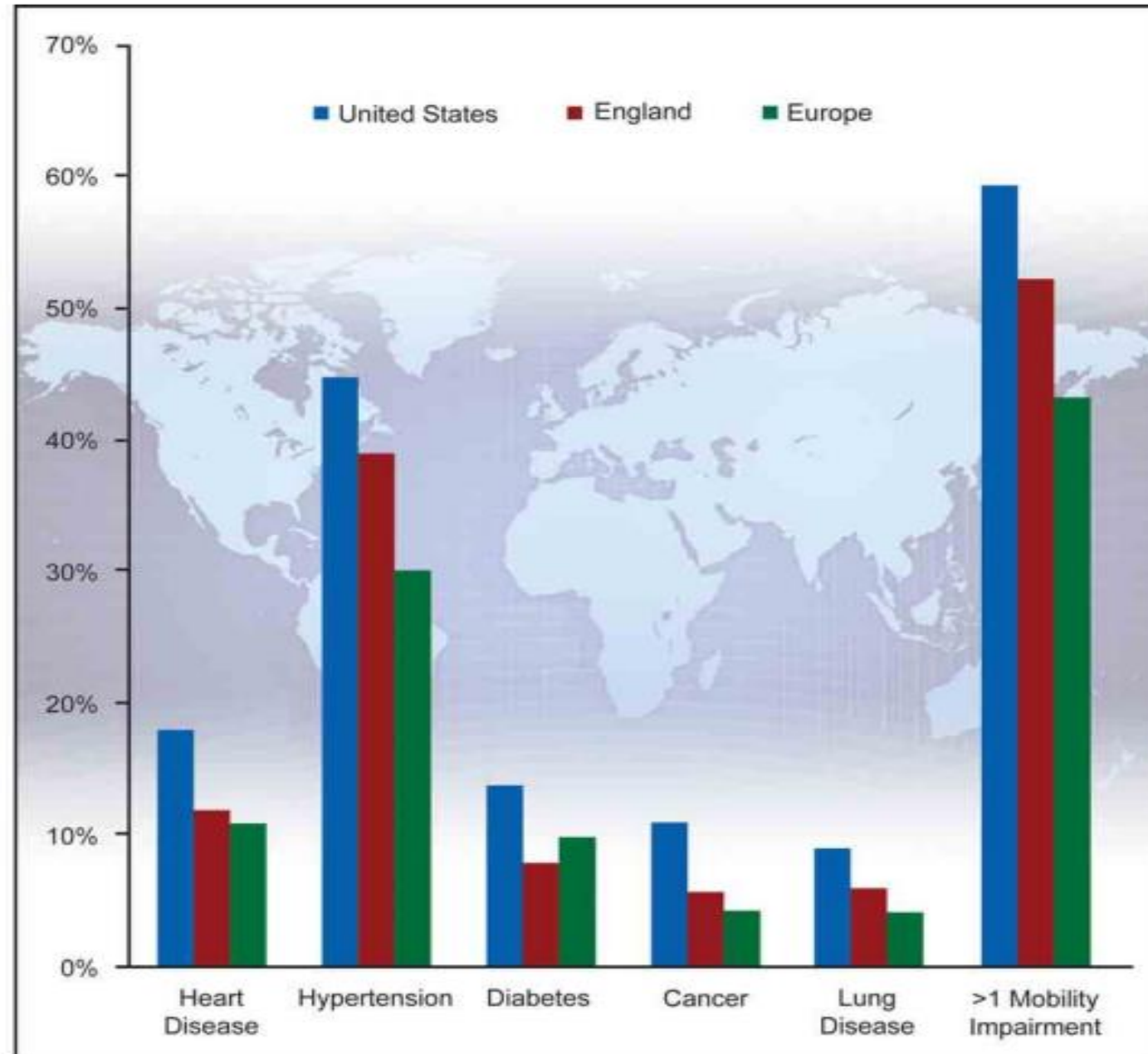
Source: Ministry of Economy and Planning, Central Department of Statistics and Information



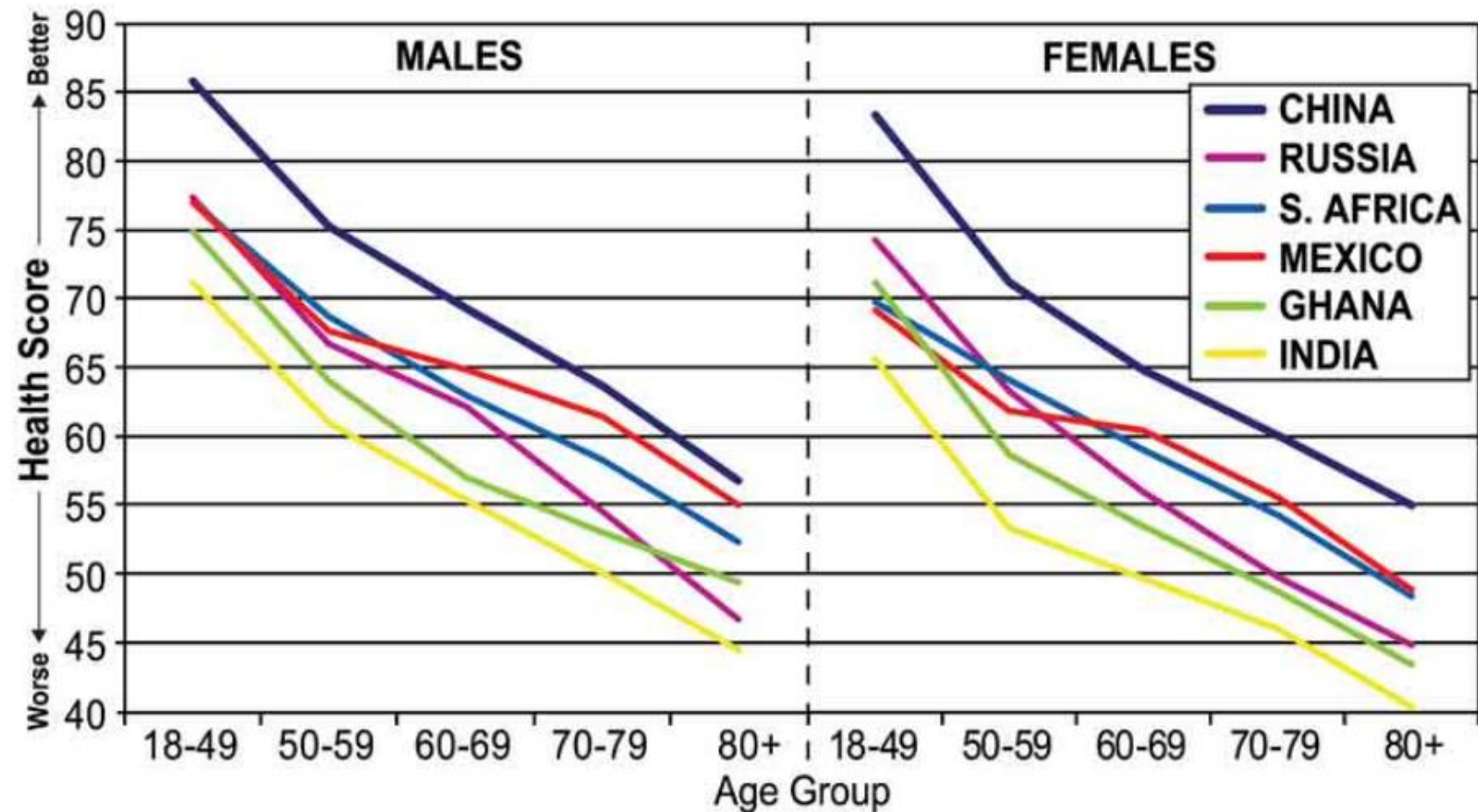
# EFFECTS OF AGEING



## Prevalence of Chronic Disease and Disability among Men and Women Aged 50-74 Years in the United States, England, and Europe: 2004



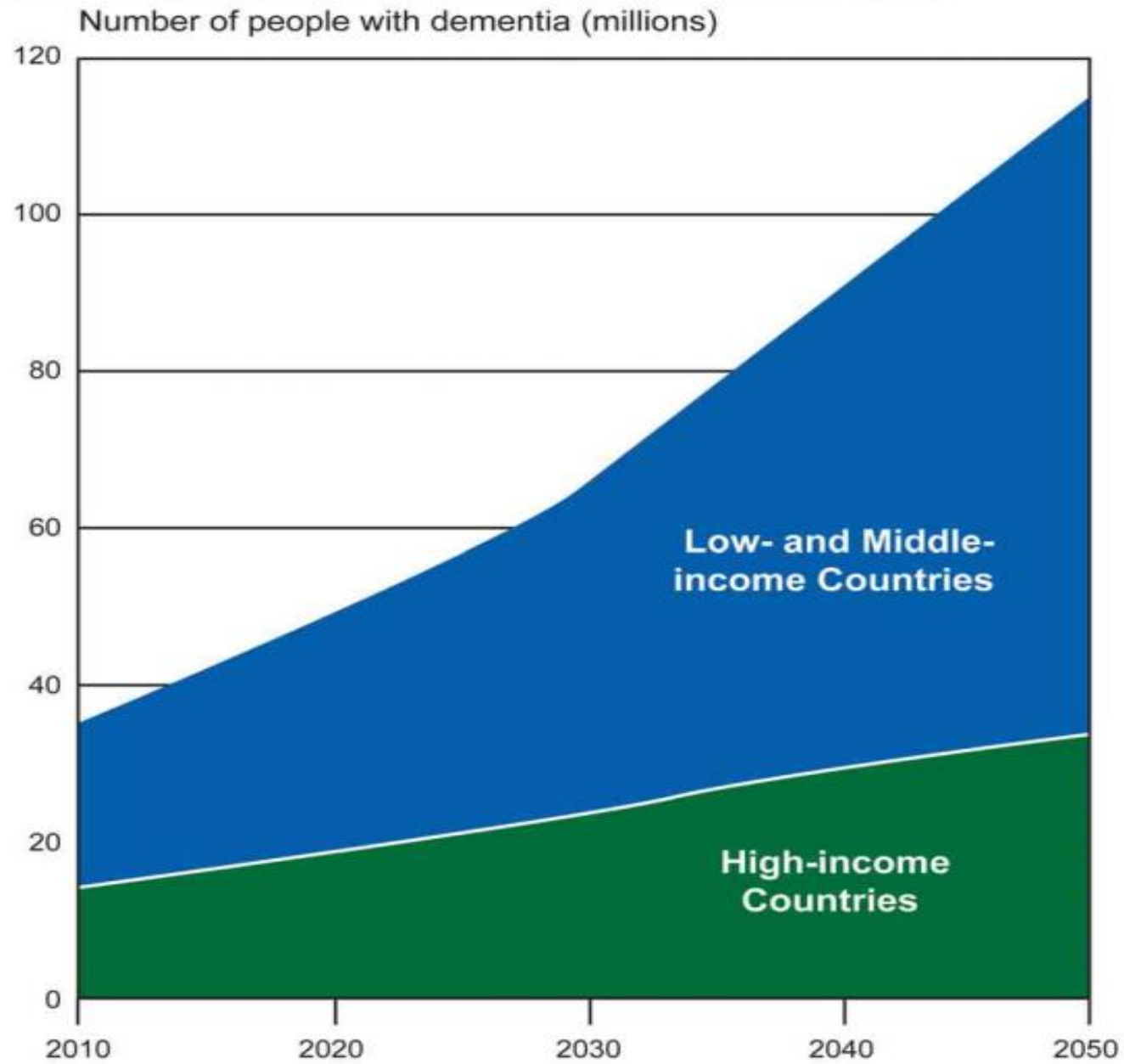
## Overall Health Status Score in Six Countries for Males and Females: Circa 2009



Notes: Health score ranges from 0 (worst health) to 100 (best health) and is a composite measure derived from 16 functioning questions using item response theory. National data collections conducted during the period 2007-2010.

Source: Tabulations provided by the World Health Organization Multi-Country Studies Unit, Geneva, based on data from the Study on global AGEing and adult health (SAGE).

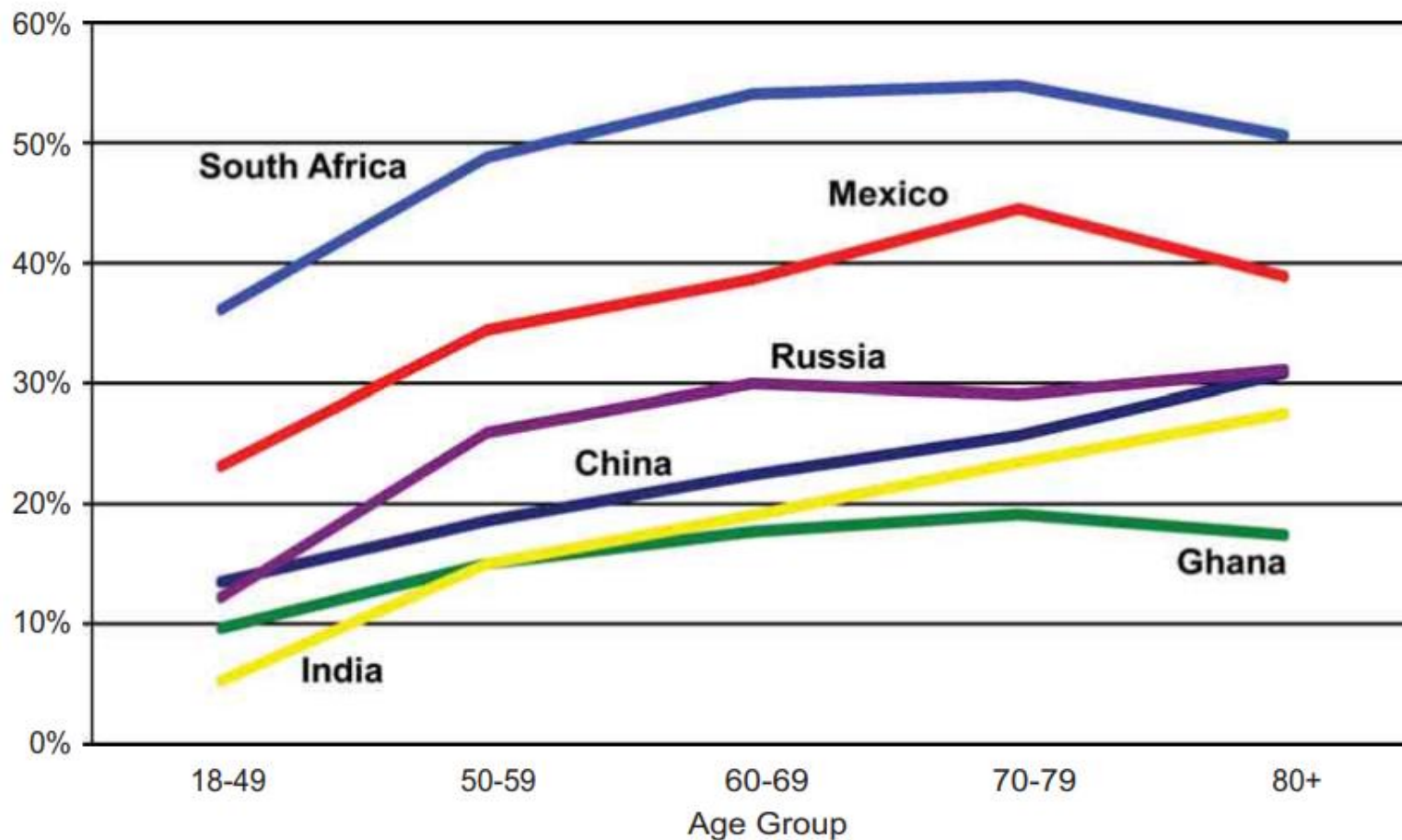
**The Growth of Numbers of People with Dementia in High- income Countries and Low- and Middle-income Countries: 2010-2050**



Source: Alzheimer's Disease International, *World Alzheimer Report, 2010*. Available at: <http://www.alz.co.uk/research/files/WorldAlzheimerReport2010.pdf>.



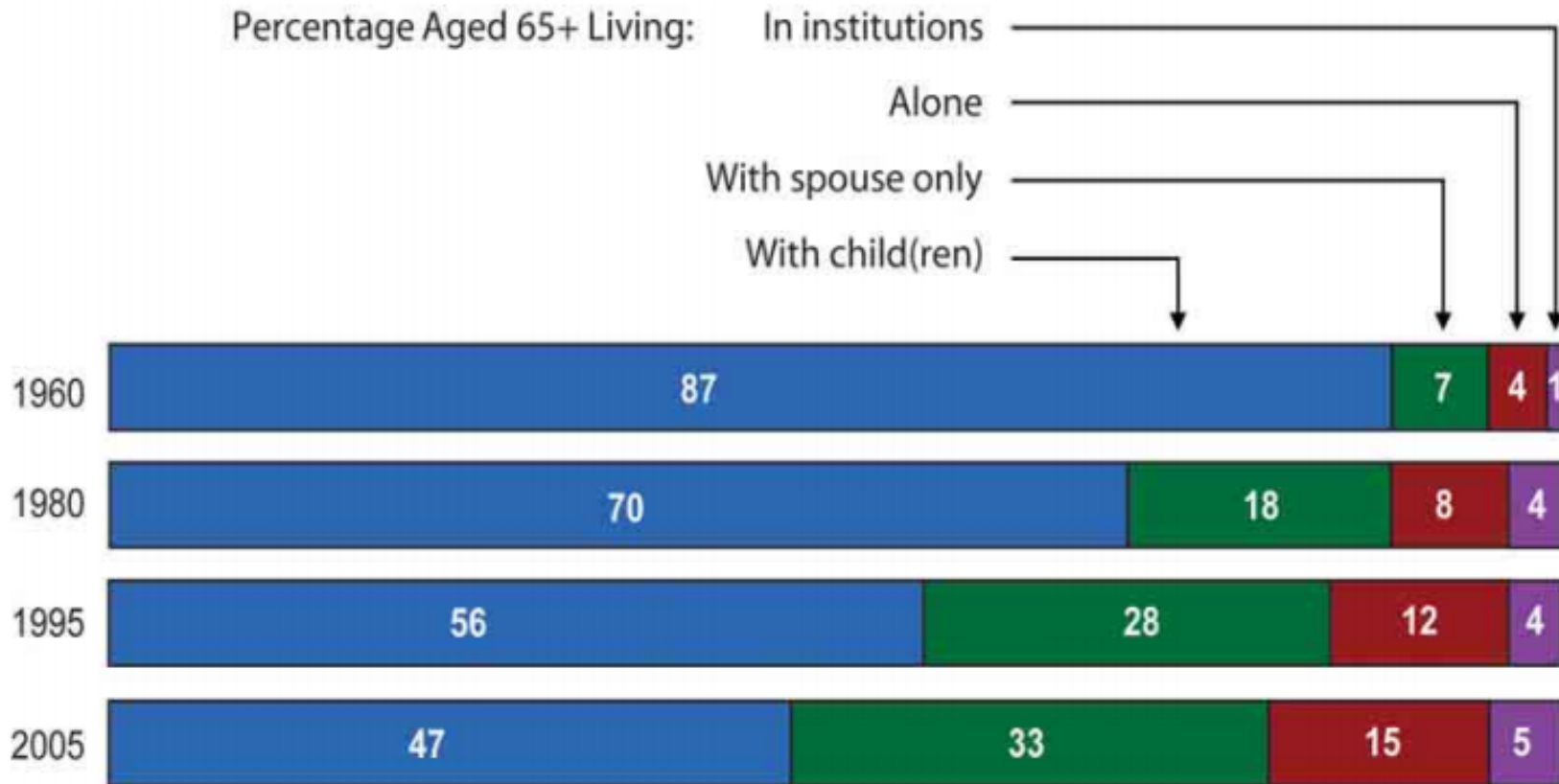
## Percentage of Adults with Three or More Major Risk Factors: Circa 2009



Notes: Major risk factors include physical inactivity, current tobacco use, heavy alcohol consumption, a high-risk waist-hip ratio, hypertension, and obesity. National data collections conducted during the period 2007-2010.

Source: Tabulations provided by the World Health Organization Multi-Country Studies Unit, Geneva, based on data from the Study on global AGEing and adult health (SAGE).

## Living Arrangements of People Aged 65 and Over in Japan: 1960 to 2005



Note: Percentages living with child(ren) include small numbers of people living in unspecified arrangements.

Sources: Japan National Institute of Population and Social Security Research. *Population Statistics of Japan 2008*.

Available at: <http://www.ipss.go.jp/p-info/e/psj2008/PSJ2008-07.xls>.

# PROBLEMS OF THE ELDERLY

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## PHYSICAL PROBLEMS

Chronic/degenerative diseases

Nutrition problems

Impairment of special senses

Unintentional injuries

Deterioration of functional abilities

Polypharmacy

## MENTAL PROBLEMS

Cognitive impairment :

(Dementia)

Psychological problems:

(Depression)

## SOCIAL PROBLEMS

Low social contact

Low social involvement

Decrease income

Unsuitable living conditions

## GLOBL CHALLENGES FACING THE INCREASE IN THE ELDERLY POPULATION

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- Strains on the social security systems;
- Demands for health care and social services;
- Needs for trained-health workforce in gerontology;
- Needs for long-term care, particularly for dementia; and
- Counteract pervasive ageism that denies older people the rights and opportunities available for other adults.



# Health Problems (cont.)

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Physical and mental health problems among the elderly are characterized by

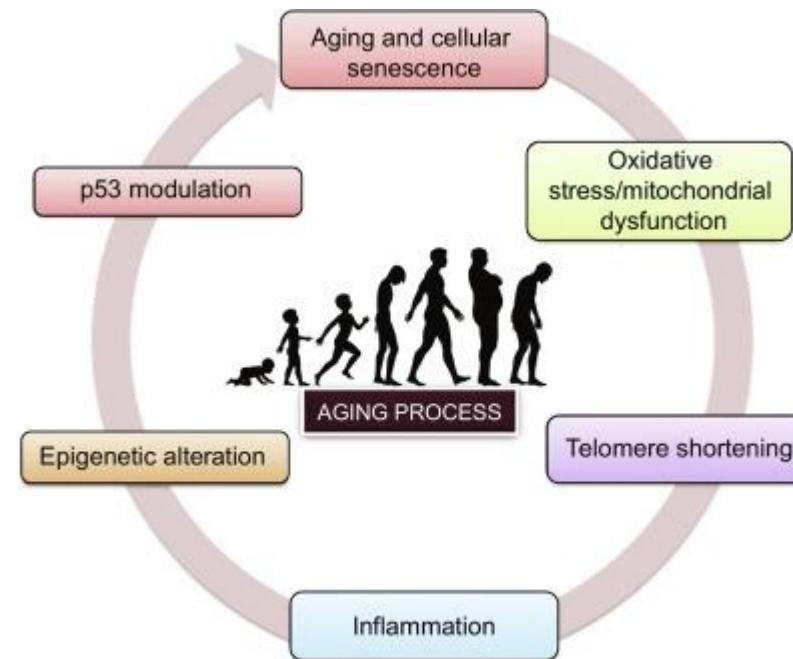
- Insidious onset
- Multitude of ailments
- Rapid deterioration

# Physiological aging

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**Senescence** - Deterioration in the vitality or the lowering of the biological efficiency that accompanies ageing.

- senile cataract
- glaucoma
- nerve deafness
- osteoporosis affecting mobility
- emphysema
- failure of special senses
- changes in mental outlook.
- others



# Long-term illness

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- Degenerative diseases of heart and blood vessels
- Cancer
- Accidents
- Diabetes
- Diseases of locomotor system
- Respiratory illnesses
- Genitourinary system



# Psychological problems

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MENTAL CHANGES

SEXUAL ADJUSTMENT

EMOTIONAL DISORDERS



# NUTRITION PROBLEM

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Primary malnutrition: Reduced intake due to social or economic reasons

Secondary malnutrition: Excess loss and reduced absorption

Overweight and obesity: imbalance between intake and expenditure of energy

# POLYPHARMACY

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Polypharmacy is defined as taken more than 5 drugs at a time including

- Prescribed medications
- Over the counter medications
- Herbal treatment

Polypharmacy is the result of

- Presence of multitude of diseases
- Physician's aim to control physical problems

Polypharmacy may have adverse health effects on the elderly in the form of side effects and drug interaction.

# IMPAIRED SPECIAL SENSES

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- Vision impairment
  - Cataract
  - Corneal opacity
  - Macular degeneration
- Hearing impairment
- Deterioration of smell



- Increase dependence on others
- Psychological problems (frustration of not hearing others)
- Social isolation
- Increase rate of unintentional injuries

# UNINTENTIONAL INJURIES

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- Mostly falls in the elderly own home
- Less likely falls outside the home

- Fractures
- Being bed bound
- Slow recovery
- Unable to regain their status
- Increase dependency



# INSTRUMENTAL ACTIVITIES OF DAILY LIVING

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- Reflects the abilities of the elderly to live independently
- It includes
  - Housekeeping
  - Shopping
  - Cooking
  - Use of transportation
  - Use of telephone
  - Dealing with money
  - Taking medications

# ACTIVITIES OF DAILY LIVING

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Reflects the abilities of the elderly for self-care

## **It includes**

- Bathing
- Dressing
- Grooming (take care of appearance)
- Feeding
- Continence (control urine and stool)
- Ambulating (moving about)
- Transfer (moving from one place to another inside the house)

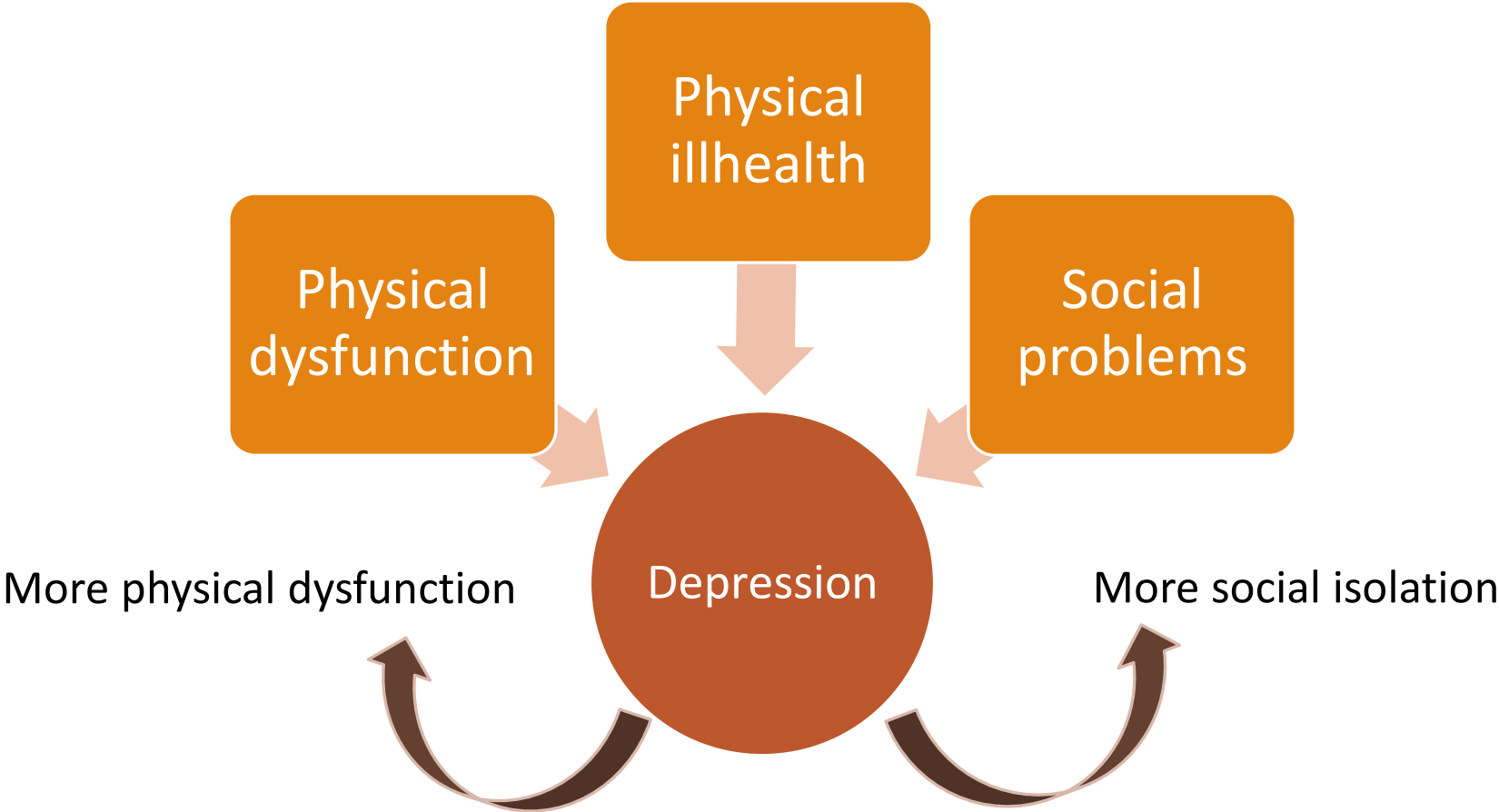
# DEPRESSION

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- Commonest psychological disorder among the elderly
- Insidious onset and progressive course
- Often not recognized by the elderly or the caregivers
- Manifested by executive dysfunction

# DEPRESSION

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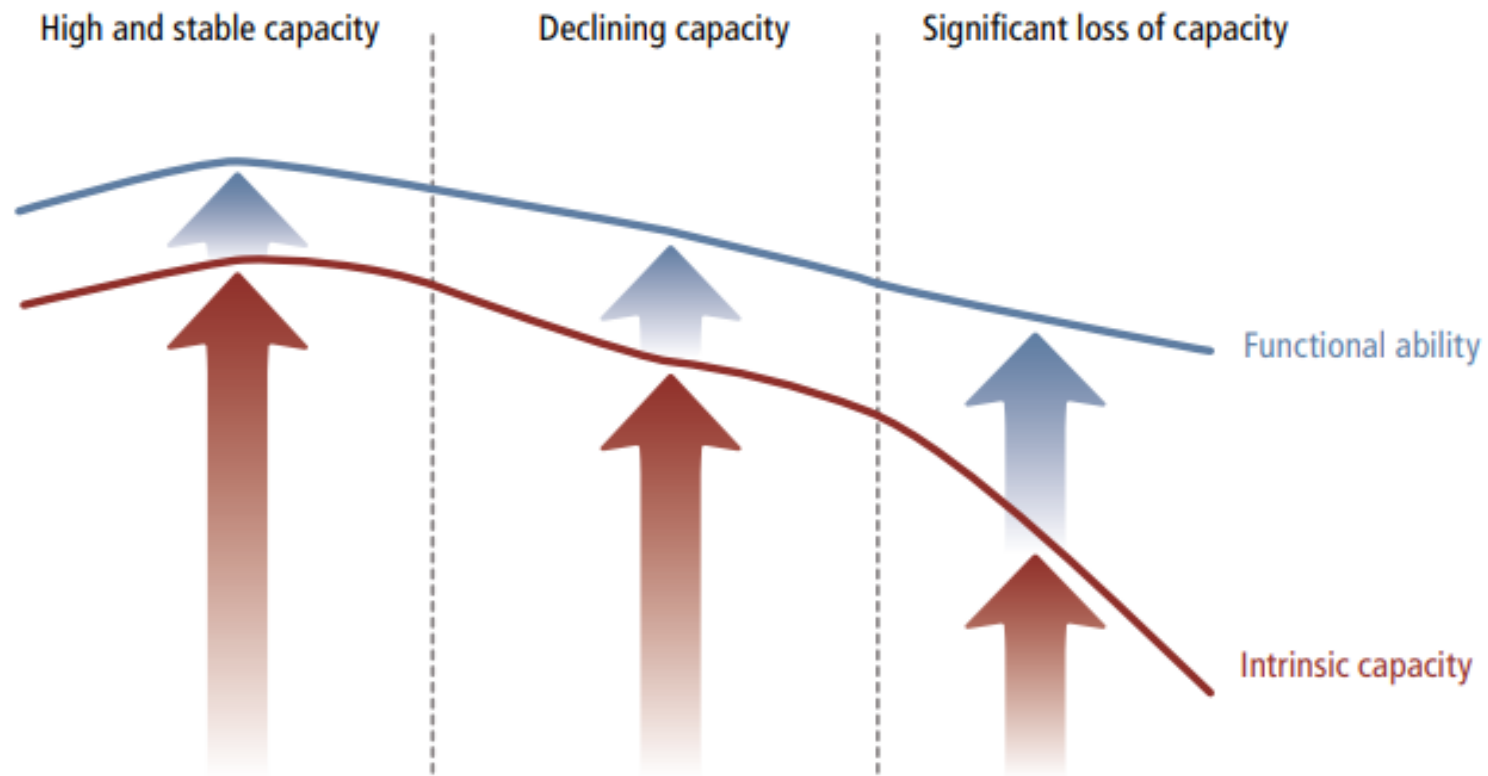
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# CARE FOR THE ELDERLY



# Framework for Healthy Ageing

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# CARE FOR THE ELDERLY

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The aim of the elderly care is

- Promote healthy ageing; growing old and delaying ill-health
- Provide a comprehensive care at the PHC for early detection and treatment of physical and mental health problems
- Provide a social support to ensure a decent and safe living
- Establish long and short term community based services to provide care for the elderly and alleviate tension on the family

# PROMOTE HEALTHY AGEING

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Promoting healthy ageing has its roots in adopting a healthy life style through the lifespan including

- Maintaining acceptable level of physical activity
- Adherence to a healthy diet
- Healthy weight
- Avoid the use of any tobacco products
- Avoid the use of alcohol
- Social activities





# EARLY DETECTION AND MANAGEMENT

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Comprehensive health assessment of the elderly at PHC to screen for major health problems through

- History
  - Medical problems
  - Unintentional injuries
  - Medications
- Use of standardized tools for the screening for
  - Nutrition problems
  - Hearing impairment
  - Incontinence
  - Functional abilities
  - Depression
  - Dementia

# SOCIAL EVALUATION AND SUPPORT

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- Social contact (living in a family, presence of caregiver, frequency of contact with caregiver, nature of relation with caregiver)
- Social activities (having a profession, friends, hobbies, special interest, outing and extent of satisfaction with social activities)
- Living conditions (comfort and safety in the house and extent of satisfaction with living conditions)
- Economic status (tangible wealth, monthly income, extent of coverage of needs)

# COMMUNITY-BASED SERVICES

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- Elderly day care centers: Elderly clubs to maintain social interaction
- Elderly day health centers: Day hospitals for elderly who need nursing care
- Home services: Provide social and nursing services to elderly in their own homes
- Residential or institutional care
  - Elderly homes (long term care for elderly who can't live independently in their own homes)
  - Nursing homes (long term care for elderly with health problems requiring continuous medical and nursing care)

# References

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Park, K. (2015). Park's textbook of preventive and social medicine.

Global health and ageing. WHO; US National Institute of Aging. October 2011