



# Geriatric Health

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## Objectives:

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

## Done by:

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Important | Extra | Notes

[Editing file](#)

## ❖ Introduction:

- "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.

What is the difference between geriatrics & gerontology?

- Geriatric (طب الشيخوخة) = conditions or health status of people at the old-age group
- Gerontology (علم الشيخوخة) = the science that deals w/ all aspects related to people in the old-age group, including physiological changes / social life/ behavioral changes.

Why do you think it is important to talk about geriatrics? What is the importance of geriatrics?

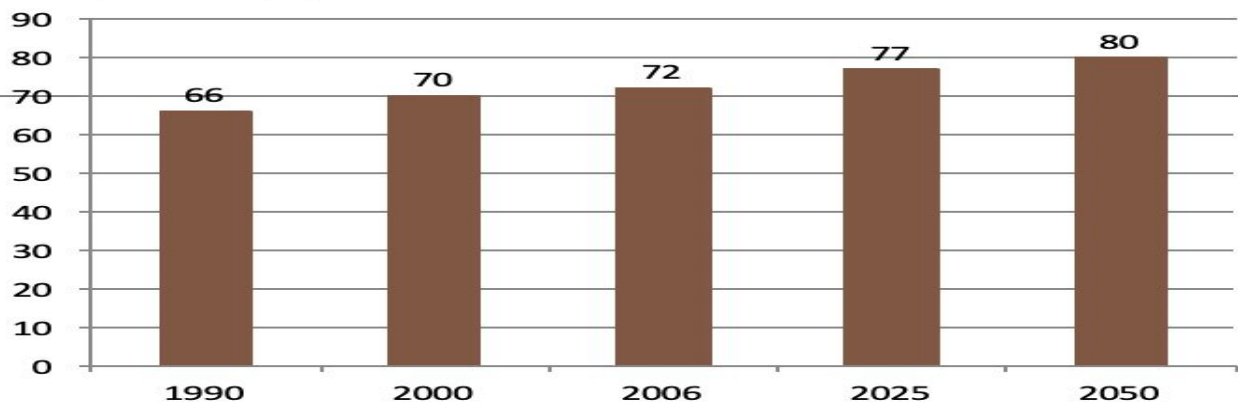
- 1) it is a natural life processor
- 2) there is a large geriatric population

## ❖ CLASSIFICATION OF ELDERLY POPULATION:

### • Classified into

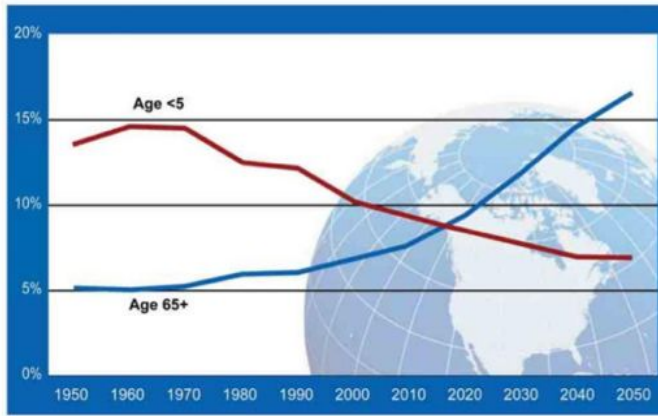
1. Young old (60 to less than 75 years)
2. Old (75 years to less than 85 years)
3. Oldest old (85 years and above)
4. Frail elderly (above 60 years with cognitive impairment or a disability)

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 rise to reach 2 billion by 2050; 70% will be living in low and middle income countries.
- This graph show an evidence that the number of geriatric population is increasing with time
- The increase is due to improving health care

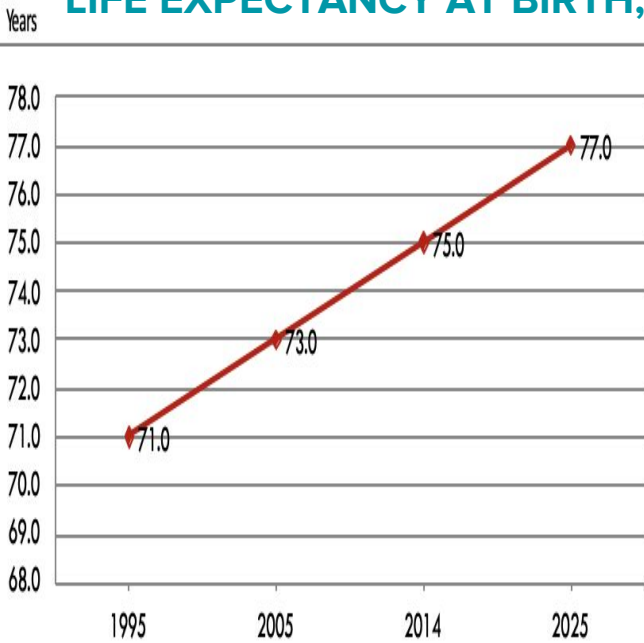
**Young Children and Older People as a Percentage of Global Population: 1950-2050**



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

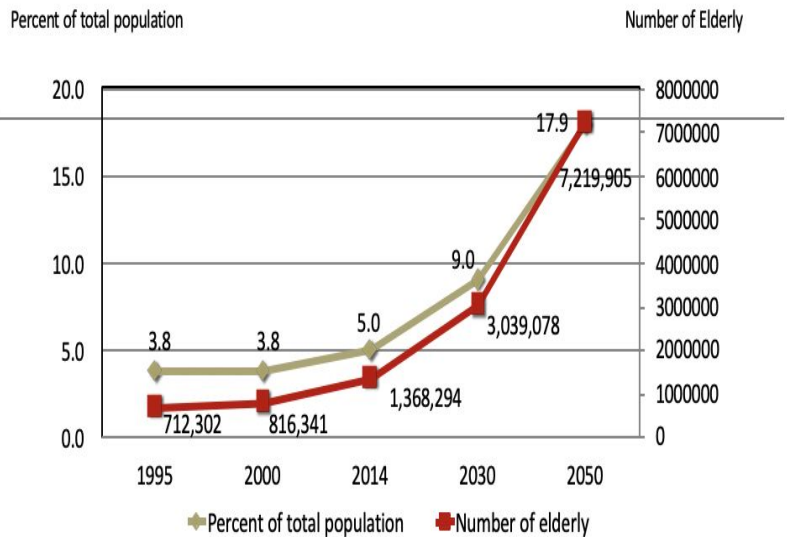
- Now (in 2019) we almost have equal proportions of children & elderly
- From 2040-2050 the proportion of young children will decrease due to birth control measures, while proportion of old people will increase

**LIFE EXPECTANCY AT BIRTH, KSA**



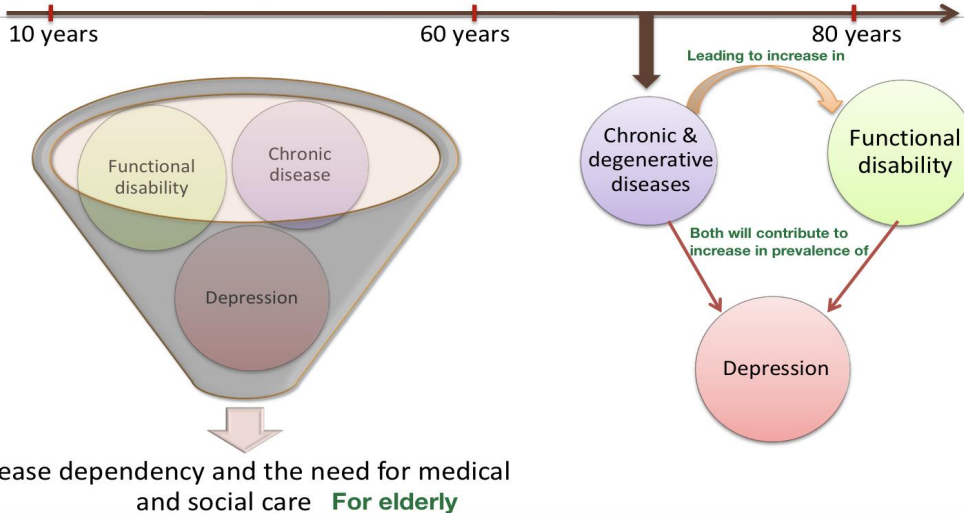
Source: Ministry of Economy and Planning, Central Department of Statistics and Information

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



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

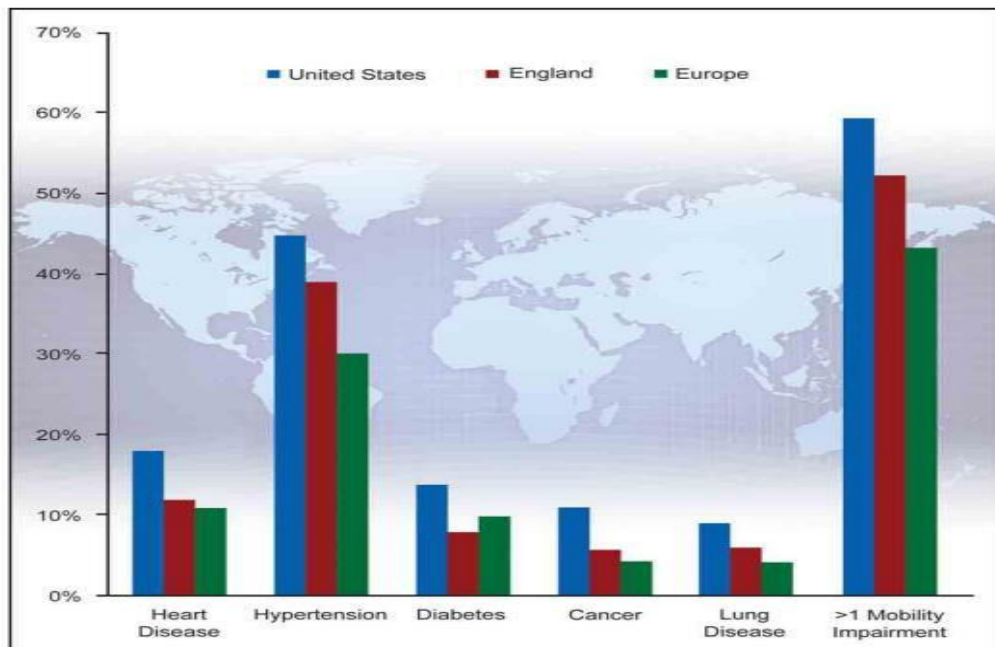
Increase longevity is associated with an increase in:



- It is not all about the occurrence of chronic diseases. The psychological effects on the elderly as they are becoming inactive, unable of doing their daily activities & more dependent on others would deteriorate their medical conditions.

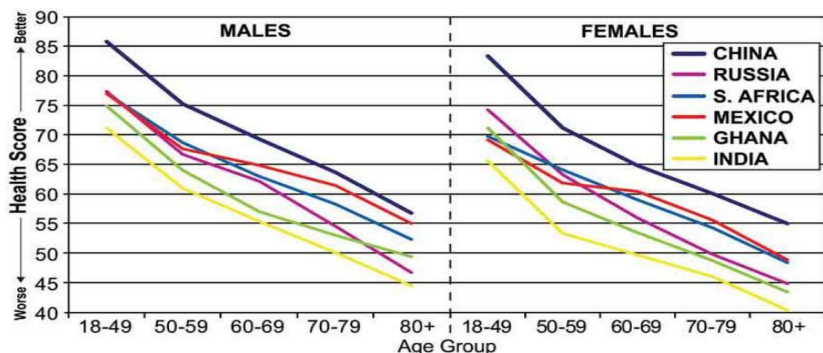
**EFFECTS OF AGEING**

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



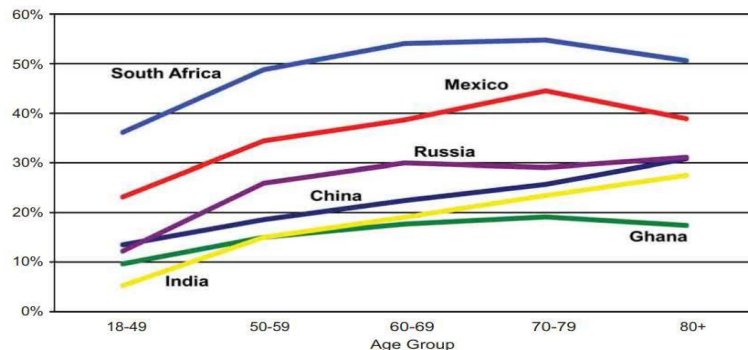
All these are chronic medical conditions among elderly

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



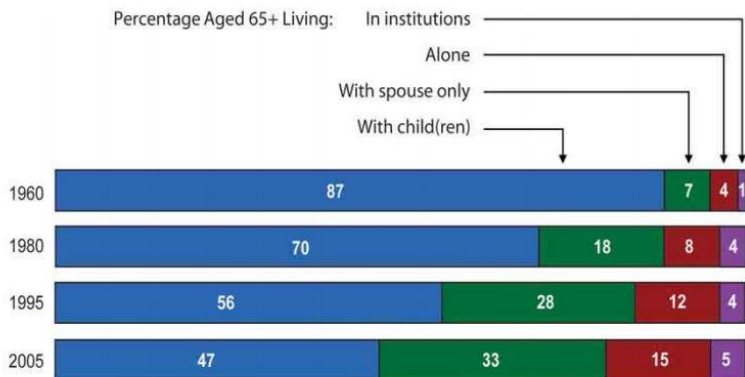
Notes: Health score ranges from 0 (worst health) to 100 (best health) and is a composite measure derived from 16 functioning questions using item response theory. National data collections conducted during the period 2007-2010.  
Source: Tabulations provided by the World Health Organization Multi-Country Studies Unit, Geneva, based on data from the Study on global AGEing and adult health (SAGE).

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



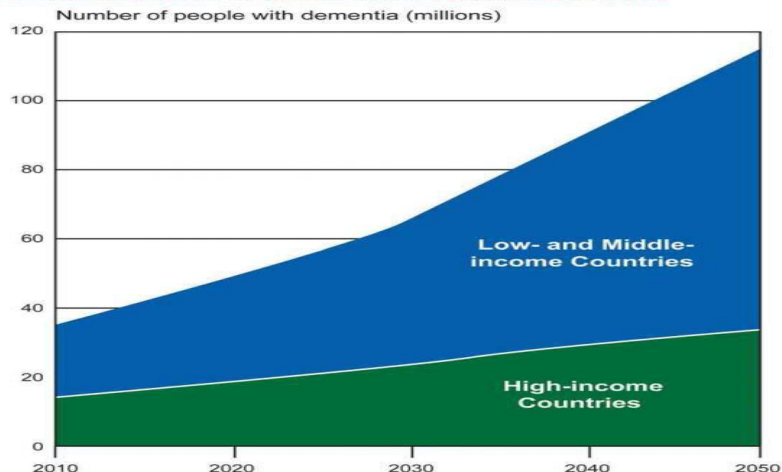
Notes: Major risk factors include physical inactivity, current tobacco use, heavy alcohol consumption, a high-risk waist-hip ratio, hypertension, and obesity. National data collections conducted during the period 2007-2010.  
Source: Tabulations provided by the World Health Organization Multi-Country 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>.

**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>.

## ❖ PROBLEMS OF THE ELDERLY:

- All the problems are related to each other

PHYSICAL PROBLEMS	MENTAL PROBLEMS	SOCIAL PROBLEMS
Chronic/degenerative diseases	Cognitive impairment : (Dementia)	Low social contact Due to previous factors. They think they are worthless
Nutrition problems	Psychological problems: (Depression)	Low social involvement
Impairment of special senses		Decrease income
Unintentional injuries <b>Such as falls</b>		Unsuitable living conditions
Deterioration of functional abilities		
Polypharmacy		

## ❖ GLOBAL CHALLENGES FACING THE INCREASE IN THE ELDERLY POPULATION :

- 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.)

- Physical and mental health problems among the elderly are characterized by:

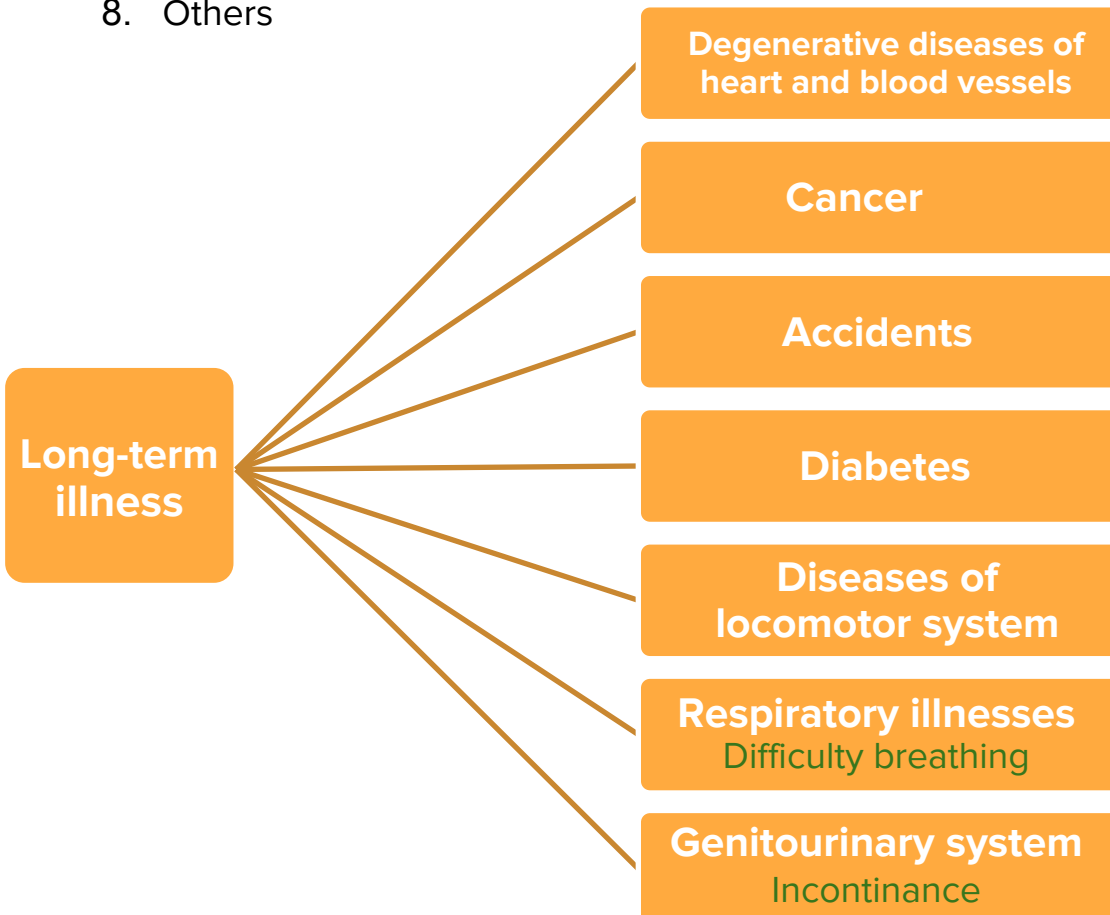
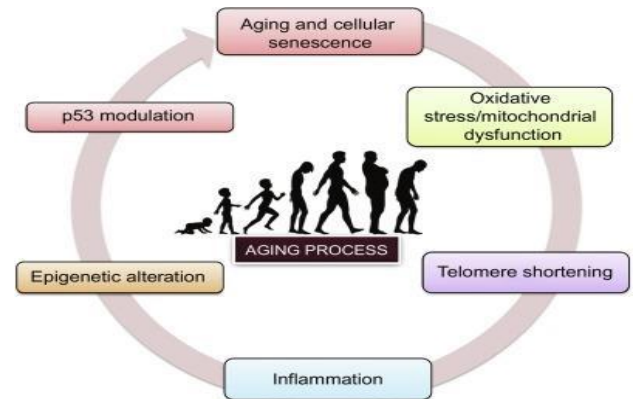
1. Insidious onset.  
(Progressive onset)
2. Multitude of ailments.  
Multiple conditions arise at the same time  
(can be combination of physical/social/mental factors)
3. Rapid deterioration

## ❖ Physiological aging

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

Degenerative diseases are secondary to physiological aging

1. Senile cataract
2. Glaucoma
3. Nerve deafness
4. Osteoporosis affecting mobility
5. Emphysema
6. Failure of special senses
7. Changes in mental outlook.
8. Others



## ❖ Psychological problems:

1. MENTAL CHANGES.
2. SEXUAL ADJUSTMENT.
3. EMOTIONAL DISORDERS

## ❖ NUTRITION PROBLEM:

- **Primary malnutrition:** Reduced intake due to social or economic reasons
  - Examples: reduced intake secondary to depression or Financial issues after retirement
- **Secondary malnutrition:** Excess loss and reduced absorption **Secondary to aging**
- **Overweight and obesity:** imbalance between intake and expenditure of energy

## ❖ POLYPHARMACY:

- **It's defined as taken more than 5 drugs at a time including:**
  1. Prescribed medications
  2. Over the counter medications
  3. Herbal treatment
- **Polypharmacy is the result of**
  - Presence of multitude of diseases
  - Physician's aim to control physical problems
    - For instance: when a physician describes a drug for cholesterol to decrease the risk of coronary artery
    - diseases even if the patient is NOT diagnosed with hyperlipidemia.
- **Polypharmacy may have adverse health effects on the elderly in the form of side effects and drug interaction.**

## ❖ IMPAIRED SPECIAL SENSES:

- **Vision impairment**
  1. Cataract either senile cataract or other types.
  2. Corneal opacity
  3. 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

Resulting in increased risk of



## ❖ UNINTENTIONAL INJURIES:

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

- Risk assessment for falls has decreased the incidence of the condition.
- Physicians' role is to interfere early to prevent such events by increasing the patients awareness

- Fractures
- Being bed bound
- Slow recovery
- Unable to regain their status
- Increase dependency
- Especially head of femur fracture & worsened if the patient is diabetic

## ❖ INSTRUMENTAL ACTIVITIES OF DAILY LIVING:

- **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.

- It is important that they do their own needs & be independent long as they are capable.
- This would result in a positive psychological impact on them.

## ❖ ACTIVITIES OF DAILY LIVING:

- **Reflects the abilities of the elderly for self-care**
- **It includes**

Bathing.

Dressing.

Grooming. (take care of appearance)

Feeding.

Continence. (control urine and stool)

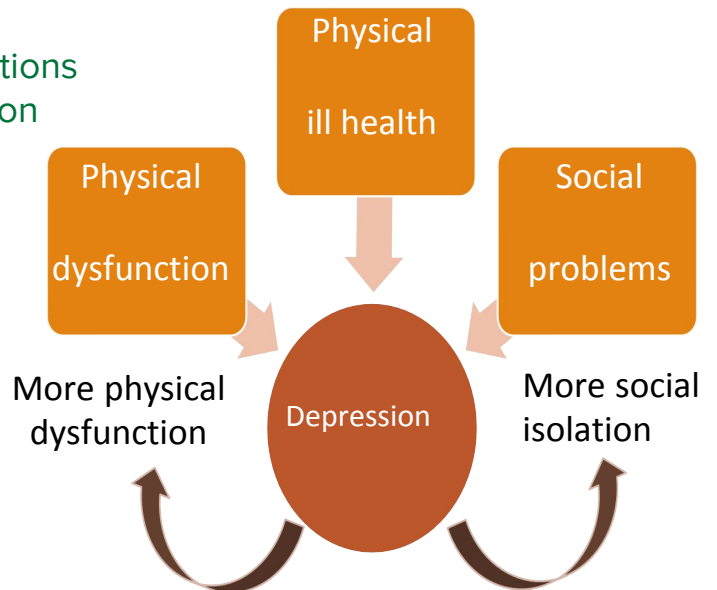
Ambulating. (moving about)

Transfer. (moving from one place to another inside the house)



## ❖ DEPRESSION:

- Commonest psychological disorder among the elderly
- Insidious onset and progressive course
- Often not recognized by the elderly or the caregivers
- Manifested by executive dysfunction
  - It can be secondary due to other conditions
  - Can be precipitated by being inactive, on Polypharmacy or isolation from community .

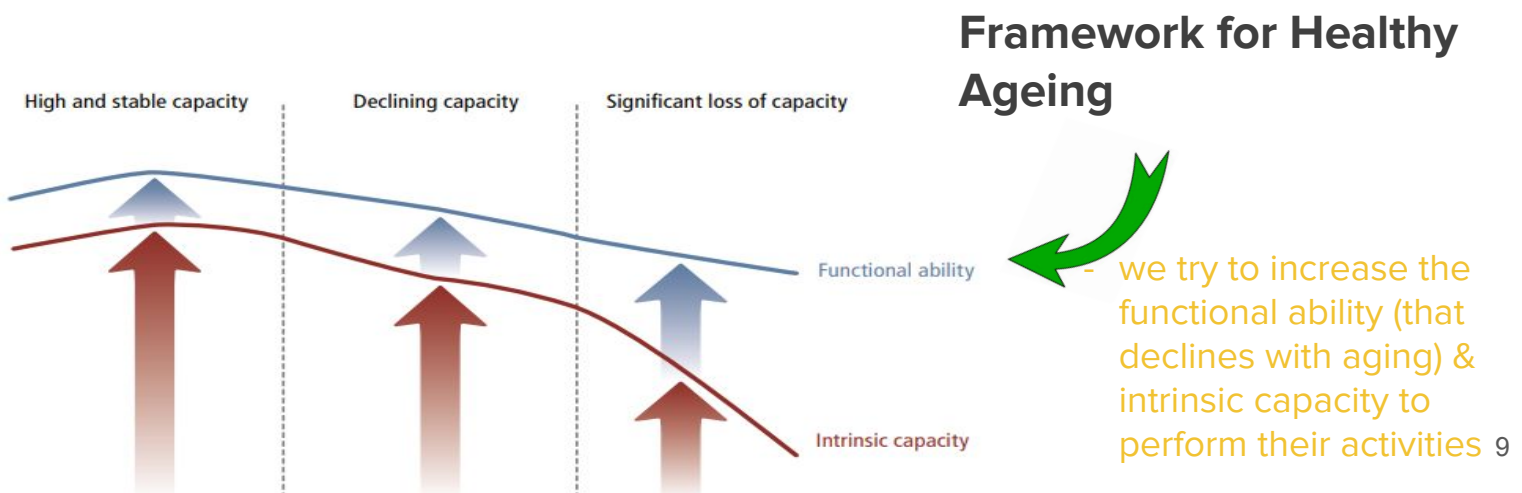


## ❖ CARE FOR THE ELDERLY:

- The care is provided from multiple levels; Hospital, Family & Community

### • 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:

- Promoting healthy ageing has its roots in adopting a healthy lifestyle 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:

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

1. History:

Medical problems, Unintentional injuries, Medications

2. Use of standardized tools for the screening for:

Nutrition problems, Hearing impairment, Incontinence, Functional abilities, Depression, Dementia.

## ❖ SOCIAL EVALUATION AND SUPPORT:

- These need to be asked in elderly but may not in young patients & It is a very important part in history taking

- 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:**

- 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).

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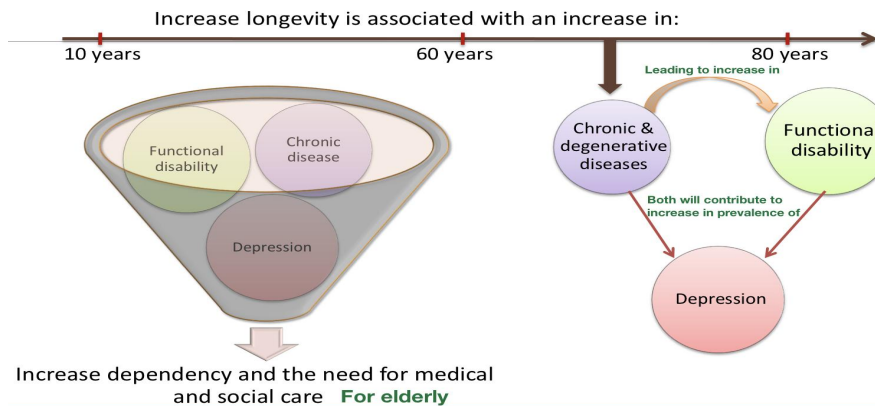
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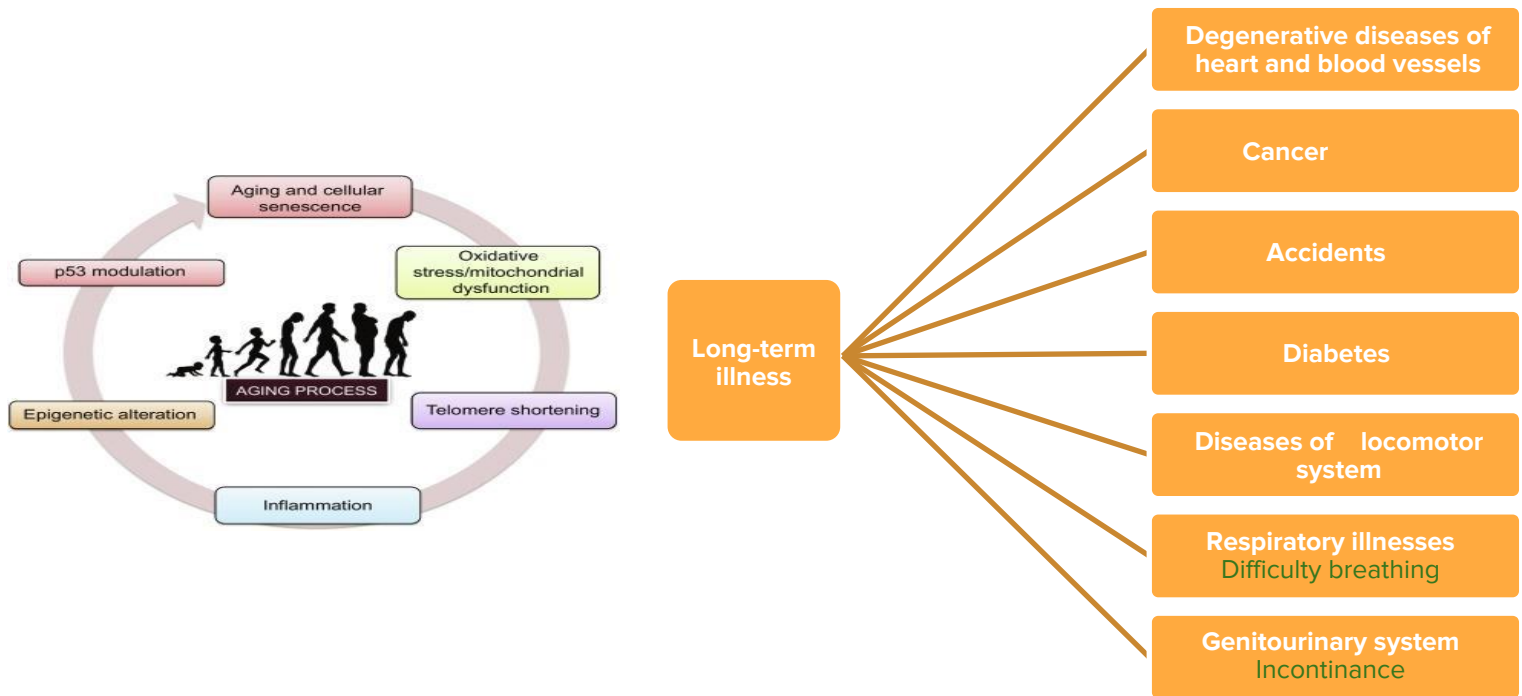
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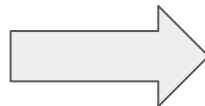
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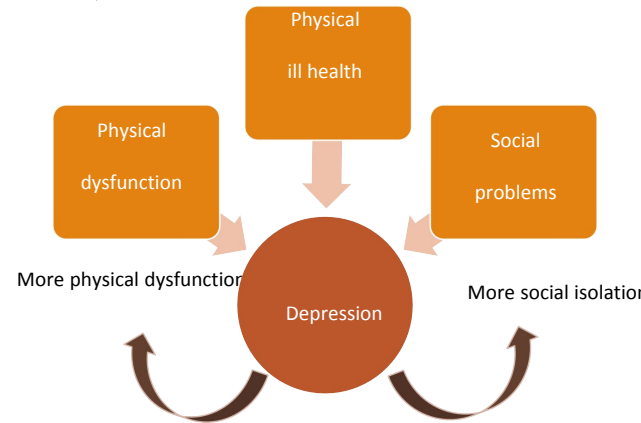
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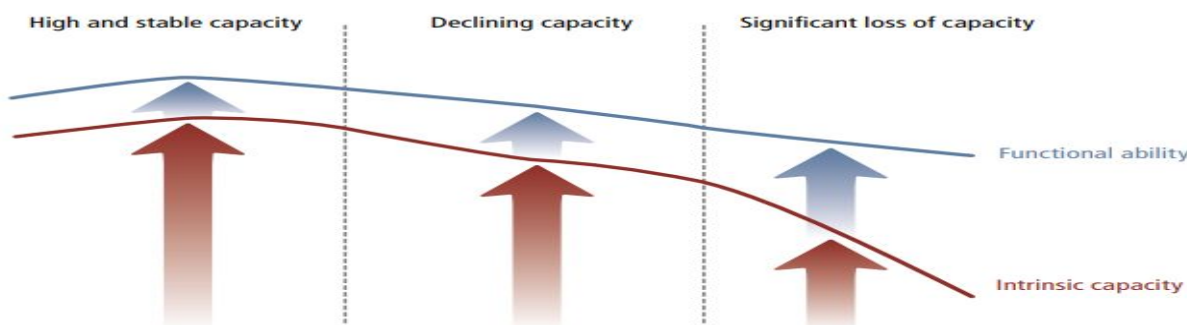
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## Framework for Healthy Ageing



we try to increase the functional ability (that declines with aging) & intrinsic capacity to perform their activities

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★ The **main objective of the “elderly health program”** as recommended by the World health Organization (WHO) is **to preserve functional abilities.**

★ The **main cause of disability adjusted life years (DALYs)** among people aged 70 years and older in Saudi Arabia is **Ischemic Heart Disease**

Good luck!

