

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



السلام عليكم ورحمة الله وبركاته

Health care of the Elderly

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Ageing is a natural process. “

Old age is an incurable disease”, *(Seneca stated);*

but Sir James Sterling Ross commented :

"You do not heal old age.

You protect it;
you promote it;
you extend it"

These are in fact the basic principles
of preventive medicine.

Old age should be regarded as a normal, inevitable biological phenomenon.

- ❖ There is no agreed upon definition of old age internationally While some developed countries use 65 years,.
- ❖ **Although the exact** definition of elderly age group is controversial, it is defined as persons with a **chronological age of 65 years** and above. **WHO 2013**

- ❑ With gradual improvement in health-care delivery services, **life expectancy** has **increased** and **thus** the percentage of the **elderly** population.
- ❑ It has been estimated that the number of people aged 60 and over will increase to **1.2 billion** in **2025** and subsequently **more than to two billion** in 2050.
- ❖ Further, by the year 2025, almost **75%** of this elderly population will be **living in developing nations**, which already have an overburdened health-care delivery system.
- ❖ These demographic transitions essentially **require** shifting the **global focus** to cater to the **preventive health-care and medical needs of the elderly population**.

An ageing population tends to have a **higher prevalence of chronic**



- ❑ An ageing population tends to have a **higher prevalence of chronic** diseases, physical **disabilities**, **mental** illnesses and other co-morbidities.
- ❑ The number of people aged 60 years and **older** was
 - **1 billion**. This number will increase to
 - **1.4 billion** by 2030 and
 - **2.1 billion** by 2050

Who is the Elderly?

Classification According to WHO:

Elderly 60 years +

Eldest elderly (very old) 80 years

Another classification :

Young old: 65 – 74 y

Old: 75 - 84 y

Old old: 85 +

Health problems of the aged

- (1) Impairments and losses due to the ageing process**
- (2) Problems Associated With Long-term Illness**
- (3) Psychological Problems**

Impairments and losses due to the ageing process :

No one knows when old age begins.

The "biological age" of a person is not

identical with his "chronological age". It is said that nobody grows old merely by living a certain number of years.

While ageing merely stands for growing old, senescence is an expression used for the deterioration in the vitality or the lowering of the biological efficiency that accompanies ageing.

With the passage of time, certain changes take place in an organism. These changes are, for the most part deleterious and eventually lead to the death of the organism.

Our knowledge about the ageing process is incomplete.

We do not know much about the disabilities incident to the ageing process.

However the following are some of the disabilities considered as incident to it;

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Health problems of the aged

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(3) Psychological Problems

I. IMPAIRMENTS and LOSSES DUE to THE AGEING PROCESS

- 1. Elevated blood pressure**
- 2. Decreased immune response**
- 3. Reduced visual , senile cataract, glaucoma**
- 4. Reduced auditory nerve, deafness & olfactory acuity**
- 4. Osteoporosis & fractures**
- 5. Slowing of mental response**
- 6. failure of special senses**

(2) PROBLEMS ASSOCIATED WITH LONG-TERM ILLNESS

Certain chronic diseases are more frequent among the older people than in the younger people. These are :

(a) Degenerative Diseases of Heart and Blood Vessels :

•Of particular importance **after the age of 40**, are the **degenerative diseases of the heart and blood vessels.**

•**narrowing of blood vessels** or

•**atherosclerosis.**

•**cerebrovascular** and peripheral vascular diseases. **and**

• **high blood pressure.**

❖**No single factor has been identified as the cause of cardiovascular diseases**

❖**Diet,**

❖**heredity,**

❖**overweight,**

❖**nervous and emotional strain**

Cardiovascular diseases are the major causes of

Impairments and losses due to the ageing process :

2) Problems Associated With Long-term Illness

(3) Psychological Problems

have all been implicated.




- ❖ Cardiovascular diseases are the major causes of death in the developed countries.
- ❖ A reduction of body weight and modification of the habits of life are needed to decrease the strain on heart and blood vessels.
- ❖ By these, it is possible to lead a longer and more useful life.

2. Cancer:

- ❖ The danger of cancer looms (emerge) ظهور large past middle life
- ❖ **The incidence of cancer rises rapidly after the age of 40**
- ❑ There are characteristic features of carcinoma of the aged:

A. Age distribution:

- ❖ The incidence of cancer differs in the different **decades of life of the age.**
- ❖ **Cancer is less frequent in (70 – 80) & (80 – 90)**
- ❖ It seems that if an old individ gnan.

- ❖ **It seems** that if an old individual passes the age of 70 years without dying of cardiovascular or malignant condition ,
- ❖ he has **a better** chance of survival & when he finally dies it is less frequently from cancer .

B. Site of cancer:

It differs in elderly from young.

- ❖ **The commonest** cancers affecting the aged is the **stomach** followed by **colo-rectal cancer** followed by **bronchus**.

C. More than one cancer :

In some aged patients, on postmortem examination **more than one malignant growth**

3 Accidents :

Accidents are a health problem in the elderly.

- ❖ The bones become fragile due to a certain amount of **decalcification** as a result of which they break easily.
- ❖ **Accidents** are **more common in** the **home** than outside.
- ❖ **Three** most common fracture sites Fracture **neck of femur**, **Vertebrae** and **Distal forearm** (Colle's fracture)
- ❖ **The principle contributing factor is osteoporosis.**

4. DIABETES :

Diabetes is a long-term illness due to faulty carbohydrate metabolism.

- ❖ **It is a leading** cause of **death** as the population grows older.
- ❖ About 75% of the diabetics are over 50 years of age.

(5) Diseases of Locomotor System:

- ❖ **A wide range of articular and non articular disorders affect the aged**
fibrositis, myositis, neuritis, gout, rheumatoid arthritis, osteoarthritis, spondylitis of spine, etc.
- ❖ **These conditions cause more discomfort and disability than any other chronic disease in the elderly**


(6) Respiratory Illnesses :

In the upper decades of life, respiratory diseases such as **Pneumonia, T.B chronic bronchitis, asthma, emphysema pulmonary embolism, are of major importance.**

7. Genitourinary systems:

There is progressive sclerosis of glomeruli with aging. with the development of **Atherosclerotic renovascular disease (ARVD)**

is a disease of the arteries in which fatty deposits (plaques) develop on the inside of the main arteries to the.

- ❖ these changes result in **reduction in GFR**
- ❖ **Serum creatinine** should not be used as a renal function test in old, because there is **decrease** in the **muscle mass** which is the source of creatinine.
- ❖ **If serum creatinine** is normal in elderly people, we should assume that there is **40% reduction** of renal function.
- ❑ **Urinary tract infections** are common in elderly due to impaired bladder emptying.
- ❑ **Urinary incontinence** is one of the **major disabilities** in the elderly.
- ❖ **Estrogen deficiency** in pos 

❖ **Estrogen deficiency** in post – menopausal females leads to atrophic urethritis, **weakness of the pelvic floor muscles** which leads to **stress incontinence**, Enlargement of the prostate, dysuria, nocturia, frequent and urgency of micturition are the common complaints.

8. Decrease the immunity:

- ❖ Due to changes in their immune system,
- ❖ decrease **number of lymphocytes**,
- ❖ **T cell response decrease** in elderly which leads to increase their susceptibility to infections & malignancy.
- ❖ Suppressor T cells decrease, so there is increase **incidence of auto-antibodies** .

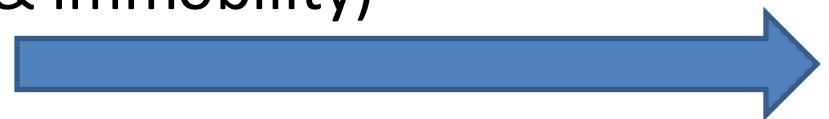
9. Digestive system problems:

- ❖ Most of the digestive symptoms in old people are **due to functional bowel disturbances**.
- **Inadequate mastication** (absent teeth) will allow large particles of food to reach the intestine, rapid passage of food results in incomplete digestion.
- **Impaired absorption**: greater amount of food will reach the caecum giving rise to **colonic disturbance**.
- There is high incidence of **constipation**, irregular bowel habit

10. Malnutrition:

- **The elderly often have special nutritional requirements due to:**
- **Reduced intake**, (poor dentition, loneliness, poverty, ignorance)
- **Physical or mental diseases**.
- **Medication** use.
- **Functional status** (dependence & immobility)

To Maintain Proper Health



❖ To Maintain Proper Health , **Certain Rules** Must Be Respected

A . **Adequate water** intake is very important to:

- ✓ Maintain proper healthy state of tissues
- ✓ Proper kidney function
- ✓ Maintain digestive secretions
- ✓ Avoid constipation

B. Type of food: should be easy to digest , appetizing , nourishing , containing good amount of mineral salts , trace elements & vitamins.

C. Animal fat should be substituted by vegetable oil

D. Protein intake should be reduced.

(3) PSYCHOLOGICAL PROBLEMS

Impairments and losses due to the ageing process :
2) Problems Associated With Long-term Illness
(3) Psychological Problems

(A) Mental Changes :

Impaired memory, rigidity of outlook and dislike of change are some of the mental changes in the aged.

❖ **Reduced income** leads to a fall in the living standards of the elderly; it does have **mental and social consequences**.

(B) Sexual Adjustment

Between 40 and 50, there is **cessation** of reproduction by women and **diminution** of **sexual activity** on the part of men.

During this phase, **physical and emotional disturbances** may occur. **Irritability, jealousy** and **despondency** اليأس are very frequent.

(C) Emotional Disorders



(C) Emotional Disorders :

Emotional disorders result from social maladjustment.

The degree of adaptation to the fact of ageing is crucial to a man's happiness in this phase of life.

❖ **Failure to adapt can result in bitterness, inner withdrawal, depression, weariness of life, and even suicide.**

Lifestyle and healthy ageing People can do a great deal to **influence** their individual **risk of developing many of the diseases** of later life by paying careful attention to lifestyle factors

Psychological problems:

- ❖ The intellectual functions are reduced,
- ❖ The speed of learning decreases,
- ❖ Gradual loss of memory specially for recent events.
- ❖ There is psychological disturbance & emotional instability in the form of senile dementia, depression,

By adopting a healthier lifestyle, the risk of a whole range of diseases can be reduced.

These factors are :

(a) Diet and Nutrition :

(b) Exercise :

(c) Weight :

(d) Smoking :

(e) Alcohol :

(f) Social Activities :

(A) Diet And Nutrition :

(a) Diet and Nutrition (b)
Exercise :
(c) Weight :
(d) Smoking :
(e) Alcohol :
(f) Social Activities :

❑ **A good diet** reduces the chances of developing the diseases of old age

❖ **One of the problem** is excessive **fat** intake.

- **Saturated fats and trans-fatty acids**, have been linked to raised **cholesterol** levels in the blood, leading to
- **increased risk of cardiovascular disease.**
- People should eat healthy diet **since very early age**
- **To avoid** or delay diseases.
- The diet should be balanced with **less saturated fats** and oils (**to less than 30% of total calories**,)
- should **contain lots of fruits and vegetables**
- **salt and sugar** should be **less**;
- **include plenty** of calcium rich food; eat high fiber diet;

(b) Exercise :

- ❖ Being physically active (being moderately physically active
- ❖ for half an hour on 5 days or more of the week) substantially:
- ❖ Exercise helps maintain good health, as it helps to
- **control** weight,
- **improves** emotional well-being and **relieves** stress,
- **improves** blood circulation
- **lowers** blood pressure
- **increases** flexibility
- **increases energy** levels, improves balance and thus
- **reduces** the dangers of falls
- **lowers** blood sugar levels thus helps in diabetes,
- **improves bone density** and thus helps **prevent** osteoporosis
- **Decreases** the risk of colon cancer and diabetes.


(C) Weight



(C) Weight :

- ❖ **Overweight and obesity** have become **major problem worldwide** and it contributes to many diseases of later life.
- ❖ Obesity is an important factor in **heart disease, stroke, hypertension**, diabetes, arthritis (**especially in the knees**), and **breast cancer**.

(D) Smoking :

- It is estimated that **22%** of men and **18%** of women aged
- **65 to 74 years** in developed countries are smokers .
- Though this figure is lower than among younger adults, **older people** have usually **smoked for longer**, have been and **continue to be heavy smokers**, and
- are **likely to have chronic diseases**, with smoking causing further deterioration.
- **Former smokers live longer than** 

Cont. ..Smoking

- ❖ Former smokers live longer than continuing smokers;
- ❖ **smoking cessation** at the age of **50** years **reduces** the risk of dying within the next **15** years **by 50%**.
- ❖ For some, but not for all **former smokers**, the risk of developing smoking-related diseases reverts to that of **lifelong non-smokers**

(e) ALCOHOL :

(a) Diet and Nutrition
(b) Exercise :
(c) Weight :
(d) Smoking :
(e) Alcohol :
(f) Social Activities :


- Drinking beyond a specified amount **contributes to a number of later life diseases.**
- Research suggests that **sensitivity to the effect of alcohol increases with age.**
- Older people achieve a **higher blood alcohol concentration**, than younger people after consuming an equal amount of alcohol.

➤ This is largely as a result of the **age-related decrease**

- This is largely as a result of the **age-related decrease in the amount of body water** which dilutes alcohol.
- While younger people are likely to develop **tolerance to increasing amount** of alcohol, **older people** have a **decreased ability** to develop this tolerance
- Drinking is linked to **liver diseases, stomach ulcers, gout, depression, osteoporosis, heart disease, breast cancer, diabetes** and **hypertension**

(f) Social Activities :

(a) Diet and Nutrition
(b) Exercise :
(c) Weight :
(d) Smoking :
(e) Alcohol :
(f) **Social Activities :**

- ❖ People who become socially isolated who rarely go out, do not join in the community activities, have few friends . or do not see much of their family - are less healthy.
- ❖ **Getting out and keeping** involved with others creates a sense of belonging.
- ❖ **Mixing with other people** 

Cont. ..Social Activities :

- ❖ **Mixing with other people** of similar age, at similar stage of life or perhaps with similar health concerns, can help people realize that they are not alone.
- ❖ **The support gained from others can be important in recovering from illness.**
- ❖ Simply knowing that others care, helps

Thank you for attention



5th Annual Global Healthcare Conference (GHC 2016)

Implication of the ageing population in terms of preventive and social medicine

تأثير الشيخوخة السكانية على الطب الوقائي والاجتماعي

The ageing population is both a medical and sociological problem. It makes a **greater demand on the health services** of a community.

In rapidly growing world, healthy ageing is vital for countries. It is a prerequisite for economic growth.

The predicted explosion of non-communicable diseases like cardiovascular diseases, cancer, and depression in the ever increasing number of older persons globally, will result in enormous human and social costs unless preventive action is taken.

The alteration of the age pyramid, however, poses significant new challenges for **governments**, **societies**, and **families in** the 21st century. Ageing developing countries are slated to face a heavy **double burden of infectious and non-communicable diseases**,