

Promoting Healthy and Active Ageing

Lesson 05

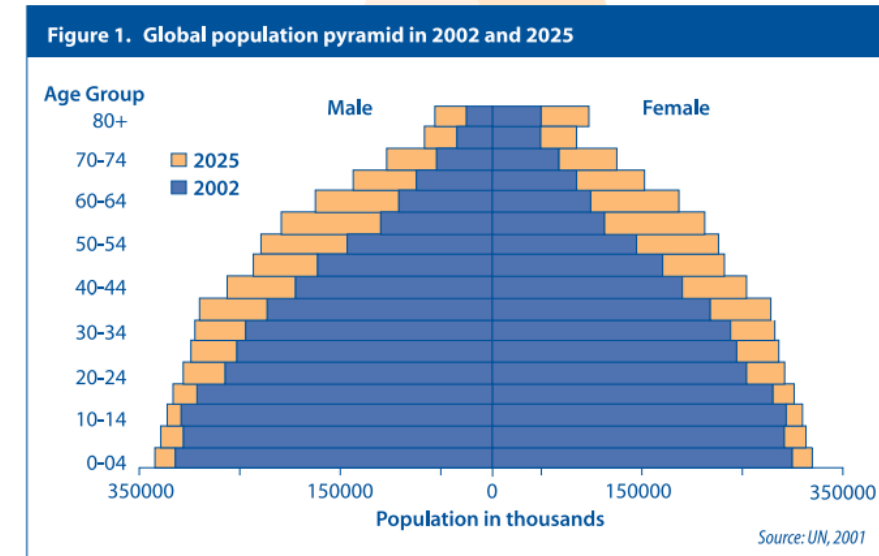
Common physical health problems among older adults

Intended Learning Outcomes

- Describe common physical health challenges and chronic conditions in older adults.
- Explain evidence-based nursing interventions for managing these conditions in clinical and community settings.
- Analyze the impact of physical health problems on independence and quality of life.

Population ageing

- Is one of humanity's greatest triumphs and also one of our greatest challenges.
- In UK, number of people aged 85 years+ projected to rise from 1.4 million in 2012 to 5 million by 2050
- With population ageing, rising numbers of older people surviving with disability and multiple health conditions.
- Ageing is the main objective of health and social policies for older adult (WHO world summit, 2002)



As the proportion of children and young people declines and the proportion of people age 60 and over increases, the triangular population pyramid of 2002 will be replaced with a more cylinder-like structure in 2025.

What are the challenges with increasing ageing population?



Common Physical Health Problems of Older Adults


- NCDs: hypertension, diabetes, CVD, COPD, arthritis.
- Neurological: dementia, Parkinson's, stroke.
- Frailty, immobility, falls, incontinence.
- Polypharmacy: risks, medication reconciliation

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The burden of disease in older people and implications for health policy and practice

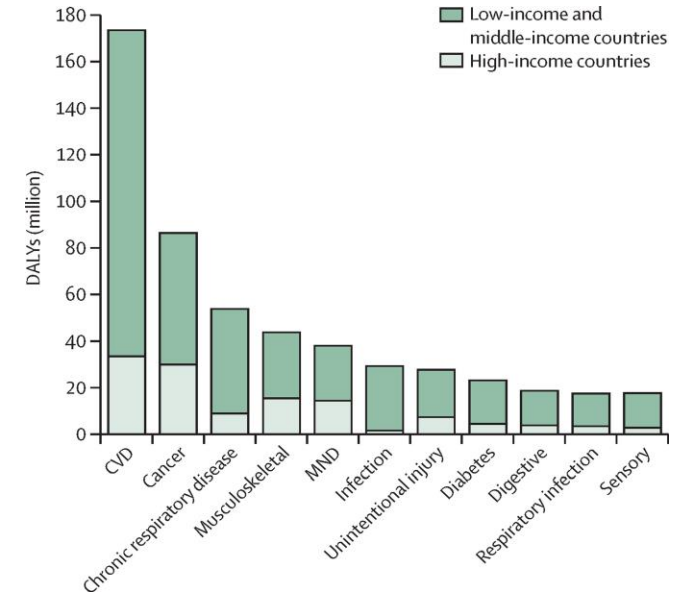
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 PlumX Metrics



Ageing and frailty

- Associated with this many older people may become frail
- Features of frailty:
 - lack of energy,
 - loss of appetite & weight,
 - ‘slowed up’,
 - slow walking speed,
 - slower (or incomplete) recovery from illness
- Good opportunity for health promotion

Springer Link

Editorial | Published: 19 January 2021

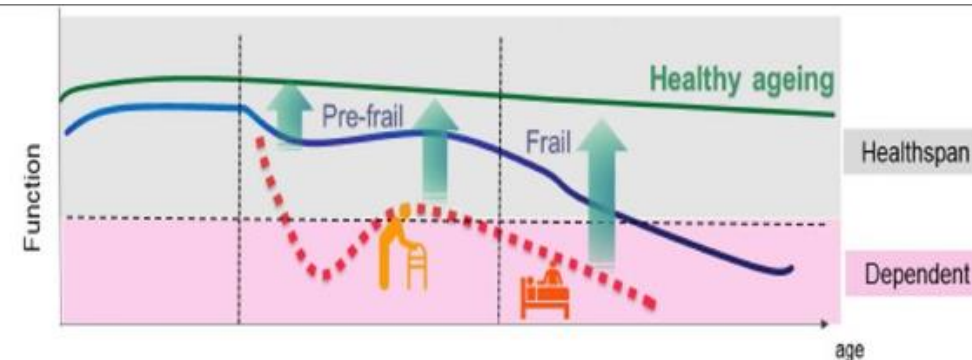
Exercise, Aging and Frailty: Guidelines for Increasing Function

R. A. Merchant, J. E. Morley & Mikel Izquierdo

The journal of nutrition, health & aging 25, 405–409 (2021) | Cite this article

14k Accesses | 22 Citations | 161 Altmetric | Metrics

The population is ageing worldwide at a phenomenal pace from 900 million ≥ 60 years old in 2015 to 2 billion in 2050 (1). The longer lifespan is due to advancement in public health, medical, social and economic development. However, healthspan has been slow to improve in



Cardio-vascular Diseases:

- hypertension
- heart disease

Cerebro vascular accident (Stroke)

Respiratory diseases

- chronic obstructive pulmonary disease (COPD)

Skeletal system:

- Osteoporosis
- Osteoarthritis

Endocrine system:

- Diabetes

Vision, hearing loss

- Senile Cataract,
- refractive errors
- Glaucoma
- deafness

Genito -Urinary system

- Incontinence
- Prostitis

Cancer

Cardiovascular Diseases (CVD)

- CVD is increase in prevalence and severity with age.
- The leading cause of death in older than 65 years of age.
- increase in incidence of:
 - Hypertension
 - Heart failure
 - Coronary artery disease
 - Stroke

Hypertension

- Prevalence of hypertension is high among older adults
- Systolic blood pressure is increased
- approx. 70 % of older adults having hypertension >60 years
- arterial stiffness is the key mechanism for hypertension

Physiological changes in older age

↓
increased collagen and decrease elastin fibers

↓
elastic fiber in arterial wall degrade and replaced by collagen fiber

↓
ability to stretch and recoil reduced in arteries causing stiffness/ Rigidity



Heart diseases

- Major factor is atherosclerosis (build-up of fatty deposits within arterial walls)
- The progressive deposition of amyloid, lipofuscin,
- Increase in collagen content in the myocardium renders the ventricles become more fibrotic and stiffer with increasing age.
- This hypertrophy and fibrosis in the ventricles impair cardiac filling and increase the risk of developing heart failure

Cerebro Vascular Accident (Stroke)

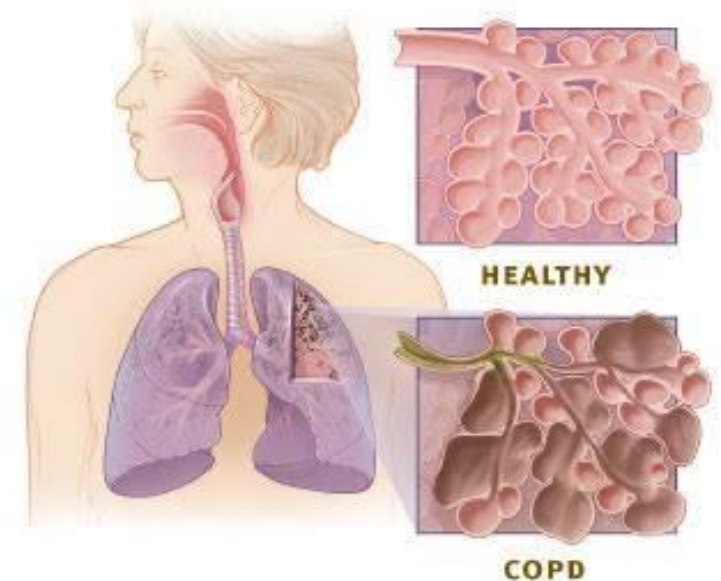
- Interruption of blood supply to a part of brain.
- Risk Factors:
 - Hypertension
 - Dyslipidemia
 - Diabetes
 - Stress
 - Smoking
 - Alcohol
 - Medication

Two types:

- Ischemic stroke - most common (80%)
- Haemorrhagic stroke

Chronic obstructive pulmonary disease (COPD)

- It is more common in older persons due to lung damage, develops gradually over many years from long-term exposure to irritants like smoke, air pollution, and occupational hazard
- It is a progressive lung disease
 - causing airflow limitation
 - breathing difficulty
- characterized by symptoms:
 - shortness of breath
 - persistent cough with mucus
 - chest tightness



Osteoarthritis

- Osteoarthritis, the most common conditions,
- Chronic degenerative disease process occurring primarily in the hips and knees.
- It is characterized by the deterioration of the joint cartilage and joint hypertrophy.
- The cause is unknown, but it is believed to be tied in some way to ageing and genetics.

Osteoarthritis: (cont..)

- Nursing management shall focus on:
 - pain control,
 - maintaining mobility and independence, and
 - avoiding fatigue.
- Nurses need to discuss:
 - progressive nature of the disease,
 - provide pain relief strategies that supplement medications,
 - discuss weight control and
 - exercise and range of motion programs, and
 - ensure that the client balances and activity with rest.

Osteoporosis

- Worldwide more than 200 million people have osteoporosis;
- More than 85% of older women diagnosed as osteoporosis.
- Postmenopausal women are the most susceptible to osteoporosis.
- Osteoporosis is a generalized progressive reduction of bone mass - causing skeletal weakness and eventual fractures.

- The causes for osteoporosis are unknown,
- but contributing factors include :
 - inadequate calcium intake,
 - immobility,
 - early menopause,
 - thin body physique,
 - sedentary lifestyle,
 - familial history.
- A diet rich in calcium and vitamin D and regular weight – bearing exercise can reduce the risk of osteoporosis
- Oestrogen supplements may also be prescribed for post – menopausal women

Cataracts

- Senile cataracts are degenerative opacities of the lens that lead to a gradual loss of vision.
- They are primarily associated with the ageing process and chemical changes in lens proteins.
- Nearly 20 million affected with Cataract blindness.
- Cataracts are generally treated with surgery.
- Most individuals have an intraocular replacement lens implanted during surgery.

Glaucoma

- Chronic glaucoma is a disorder in which increased intraocular pressure leads to eventual vision impairment and possible degeneration of the optic nerve.
- Symptoms:
 - loss of peripheral vision
 - blurred vision
 - seeing hallos around light
 - pain in eyes
 - redness in eyes
 - sudden vision loss
- Treatment is usually
 - focus on lowering eye pressure by using prescribed eye drops
 - Surgery options include trabeculectomy, tube shunts, laser therapy and minimally invasive glaucoma surgeries (MIGS).

Glaucoma Change in vision



Hearing Loss

- Hearing loss or hearing impairments (or deafness) is an individual losses the ability to hear in either by one or both ears. the level of impairment can vary from mild to severe or total loss.
- Approx. One in three people between 65 and 75 years suffer from hearing loss. and nearly more than half of the population above 75 years having hearing difficulties. It can be classified as
 - **Sensorineural**: hearing loss occur when damage to the inner ear or in auditory nerve, usually permanent
 - **Conductive**: hearing loss occur when sound waves not reach the inner ear due to earwax accumulation, fluid, punctured eardrum. medical treatment or surgery can usually restore the hearing. Hearing aids can be used
 - **Age-related hearing loss (Presbycusis)**: hearing loss develops gradually in both ears as the person ages. occur due to changes in inner ear and auditory nerve.

Emotional impact of hearing loss in older persons: depression, loneliness, Anger and withdrawal from social life

Incontinence

- Urinary incontinence is the involuntary leakage of urine.
- It may be classified as
 - Instability incontinence (a sudden urgent desire and/or detrusor contraction with immediate loss of control);
 - Stress incontinence (a loss of control on sneezing, coughing, laughing, straining);
 - Overflow incontinence (the chronic over distension of a bladder that dribbles when overfilled);
 - Functional incontinence (failure to reach the toilet because of other disabling disorders).
- It is estimated that at least 10 million individuals suffer from incontinence in the United States. It occurs in both males and females and increases with age.

A number of successful treatment options exist for incontinence, including surgery and medication.

More conservative measures for each of these causes include the following:

- Stress – Kegel exercises to strengthen periurethral muscles
- Instability – Use of a timid voiding schedule
- Overflow – Use of double voiding techniques, intermittent catheterization
- Functional – Use of voiding schedules manipulation of fluid intake, and easier access to toilet facilities.

Prostatitis

- Chronic prostatitis is a repeated bacterial infection of the prostate that causes difficulty and pain on urination.
- It is generally treated with antibiotics and an increase in fluids.
- Prostate massage and warm baths may also bring relief.
- Acute symptoms often disappear by themselves with time.

Mrs. Silva is a 79-year-old widow with a 15-year history of type 2 diabetes and hypertension. She has recently become increasingly frail, with unintentional weight loss, reduced muscle strength, and dependence on her daughter for some daily activities.

Last week, she slipped in the bathroom and sustained minor bruises. Her blood sugar remains poorly controlled despite insulin therapy, and she often forgets meals or feels too tired to eat.

Since the death of her husband, she has withdrawn from social activities and expresses feelings of loneliness and “losing purpose.” Her daughter, who is her primary caregiver, is experiencing stress while trying to balance work and caregiving responsibilities.

Case discussion

- Which nursing problems should be prioritized in this case, and why?
- How would you adapt this care plan if Mrs. Silva lived alone without a caregiver?
- What ethical issues might arise if the daughter cannot continue caregiving due to stress?
- Develop a care plan for Mrs Silva.



Thank
you

