



Elderly Health

By Dr. Shawq Alashab / FIBMS-FM/ Elderly health subspeciality
Family and community medicine department /College of medicine /
Al-Mustansiriyah university





Objectives

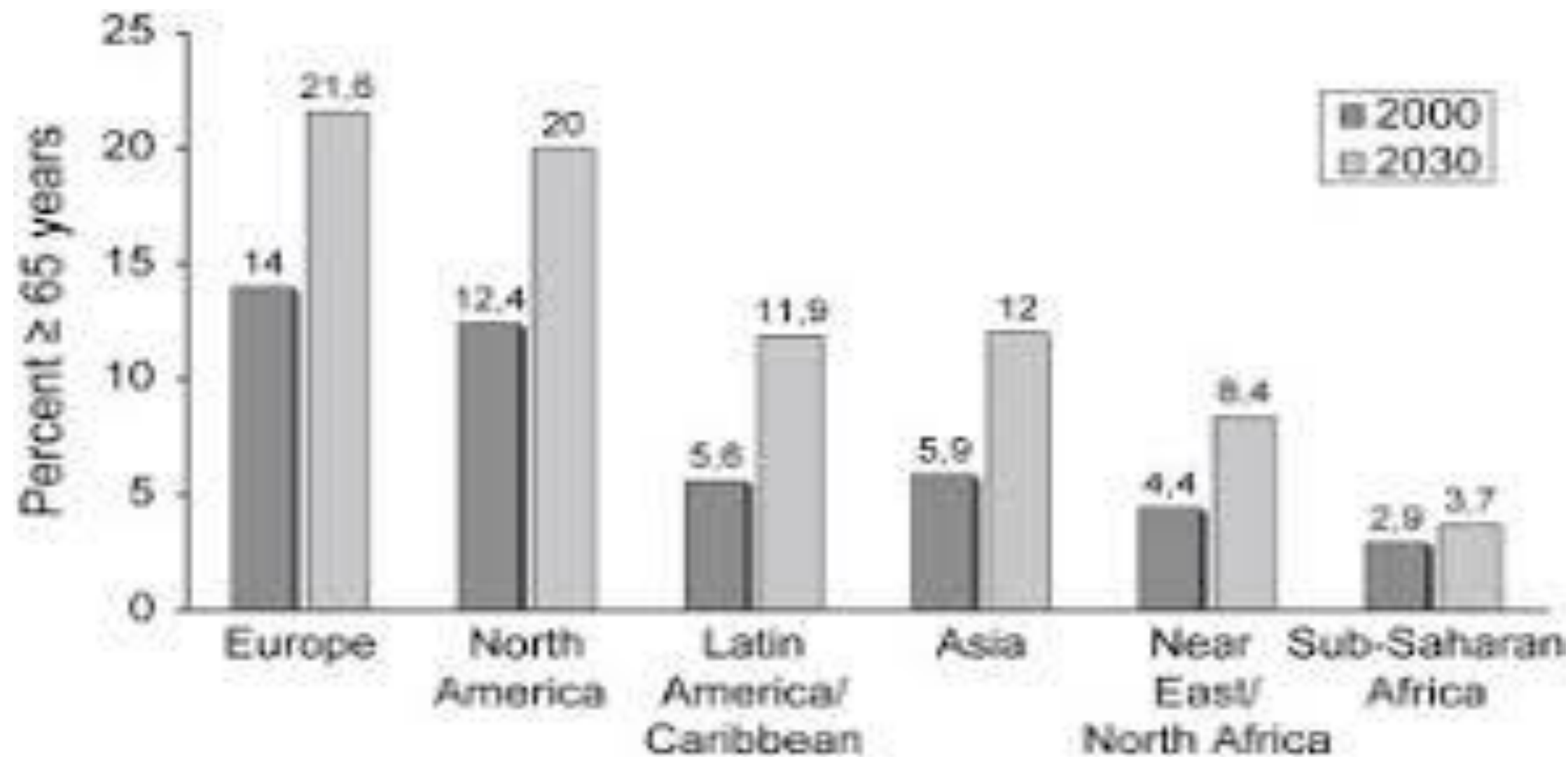
By the end of the lecture, you will be able to:

- Define an elderly person according to WHO.
- List the main domains of geriatric health.
- Recall the 5M's framework components.
- Identify common geriatric syndromes.
- Discuss the importance of cognitive and functional assessment in elderly patients.

Who is an elderly person ?

- In general, elderly is the person more than 60 years old.
- At the biological level, ageing results from the impact of the accumulation of a wide variety of molecular and cellular damage over time. This leads to a gradual decrease in physical and mental capacity, a growing risk of disease and ultimately death.



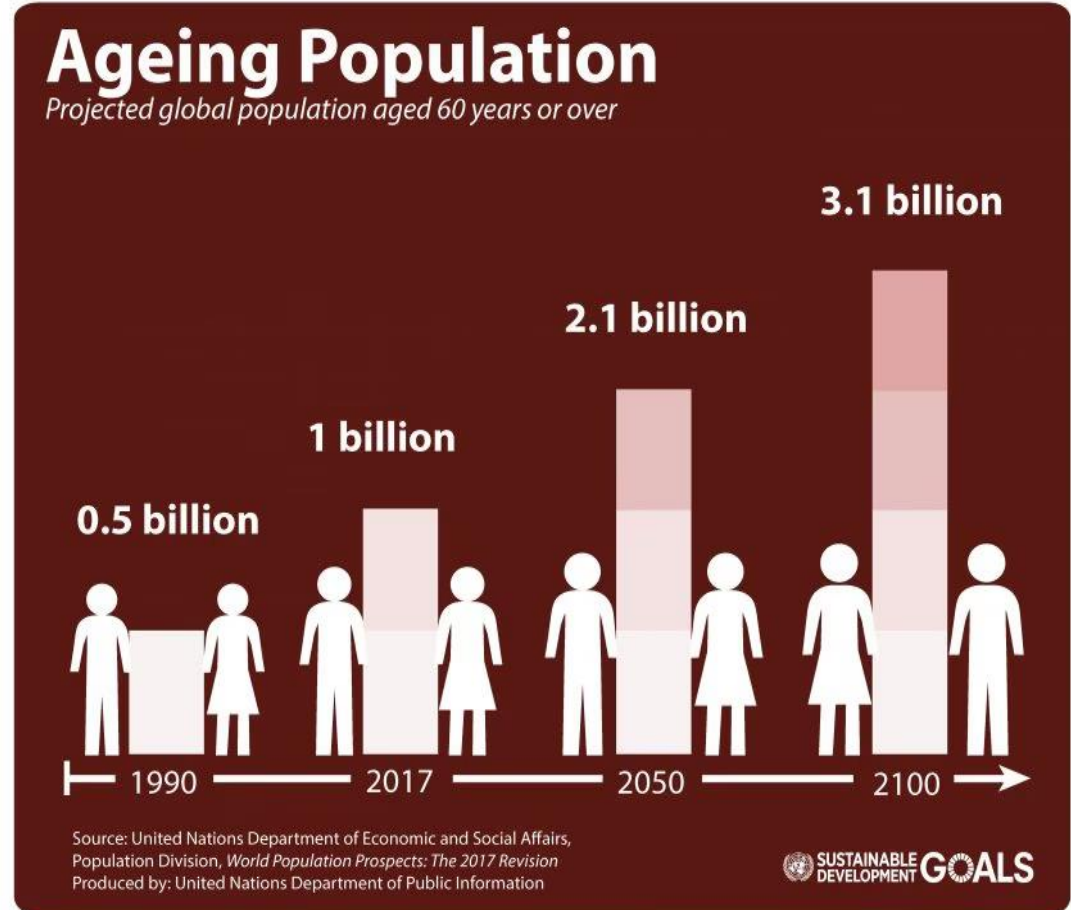


Epidemiology

- People worldwide are living longer. By 2030, 1 in 6 people in the world will be aged 60 years or over. At this time the share of the population aged 60 years and over will increase from 1 billion in 2020 to 1.4 billion..



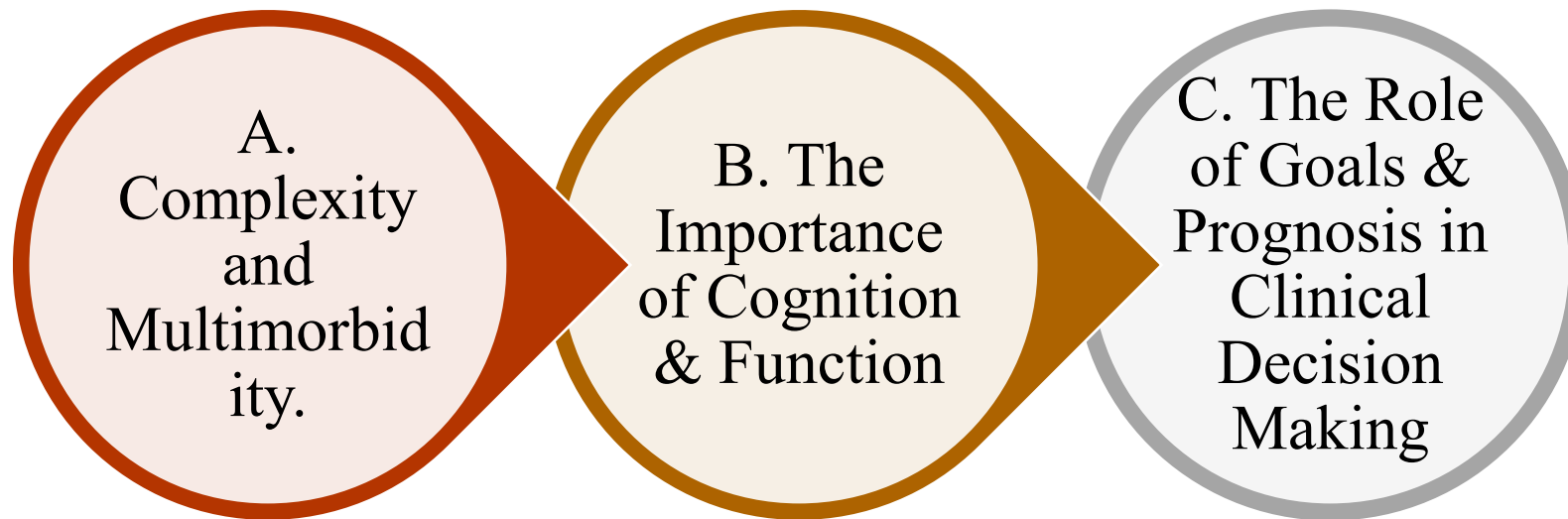
- By 2050, the world's population of people aged 60 years and older will double (2.1 billion). The number of persons aged 80 years or older is expected to triple between 2020 and 2050 to reach 426 million.



What do you think about this picture?



Three principles guide the care of older persons.



5m's framework



(1) Mind: The first “M” reminds us to assess for delirium, dementia, depression, and ways to maintain mental activity.

(2) Mobility: The second “M” prompts us to ask whether an older person requires assistance with ADLs and IADLs, requires ambulation aids for home or community mobility, or has fallen.

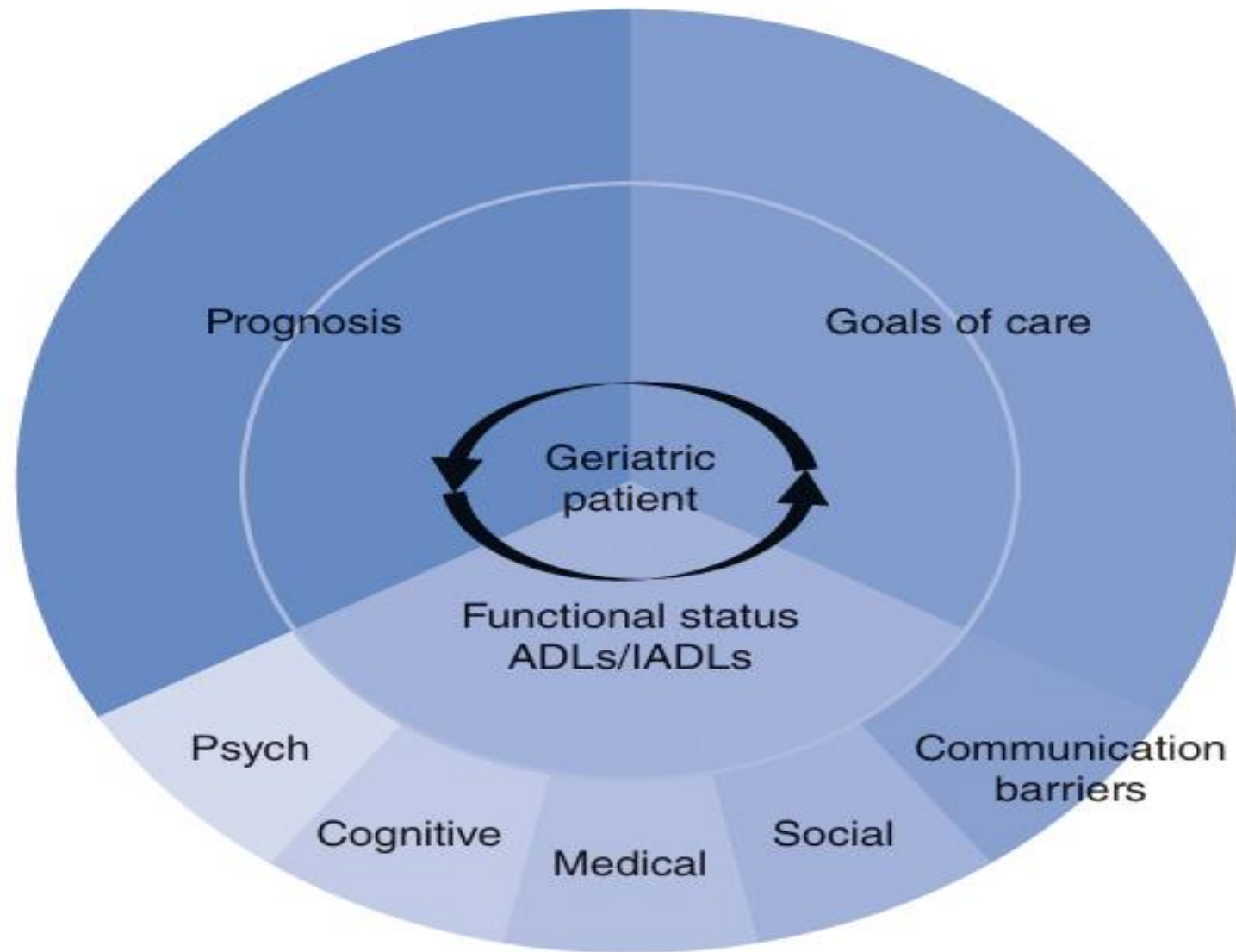
(3) Medications: The third “M” asks us to critically examine every medication and the medication list as a whole to eliminate medications that cause more burden and harm than benefit.

(4) Multimorbidity: The fourth “M” guides us to consider the impact of therapeutics on the whole person to avoid the situation where an intervention targeting one condition worsens several other conditions.

(5) Matters Most: The final “M” gives us a place to start, and end, every medical decision and encounter by aligning all actions according to what is most important to the older person.

Geriatric Assessment





▲ **Figure 2–1.** Geriatric scaffold. ADLs, activities of daily living; IADLs, instrumental activities of daily living.



Prognosis

Patient goals

Functional status

Prognosis

- An older adult's prognosis is important in determining which interventions are likely to be used.
- Prognosis generally worsens with age (especially age >90 years) and with the presence of serious age-related conditions, such as dementia, malnutrition, or functional impairment.

- When an older person's **life expectancy is >10 years**, the appropriateness of tests and treatments is generally **the same as for younger persons**.
- When life expectancy is **<10 years**, and especially when it is much less, choices of tests and treatments should be made on the basis of their **ability to improve that particular patient's prognosis or quality of life**.

Patient goals

- Conducting goals of care discussions is a critical tool for all clinicians caring for older adults, especially frail older adults.
- For many older adults, not all goals are achievable (eg, length and quality of life).
- Older persons may prioritize maintaining their independence or relieving pain or other symptoms over prolonging survival.

Ex.

- Some older persons may prioritize decreasing pain and symptoms.
- Some may prioritize independent physical function.
- Others wish to remain close with, yet not burden, their loved ones.

- another example, if a patient who has recurrent falls places high value on living at home, then a goal may be to make the home safer and adapt it to accommodate the person's disabilities or hire caregivers.



Functional Status

- Functional status can be viewed as a summary measure of the overall impact of health conditions on the patient's physical and psychosocial environment and the ability to perform their **ADLs and instrumental ADLs (IADLs)**.

Table 2–1. List of activities of daily living and instrumental activities of daily living.

Activities of Daily Living	Instrumental Activities of Daily Living
Bathing Dressing Toileting Transfers Continence Feeding	Using the telephone Shopping Food preparation Housekeeping Laundry Driving Taking medications Managing money

- Functional impairment is common in older adults and has many potential causes, including age-related physiologic and cognitive changes, disuse, disease, social factors, and the interplay between any of these.
- Functional status should be assessed initially and periodically thereafter, particularly after hospitalization, severe illness, or the loss of a spouse or caregiver.

- If no reversible cause of functional decline is found after a medical search or if it cannot be fully reversed, the clinician should focus on supportive services and, when necessary, placement in a different living setting.



How we can assess ADLs AND IADLs ?

Activity Of Daily Living



Eating



Bathing



Dressing



Walking



Transferring



Toileting

- If possible, it is important to distinguish whether an ADL/IADL impairment is primarily due to cognitive decline, a physical disability, or cultural or family customs because this will help guide management, including rehabilitation, adaptive devices, and additional personal assistance.


Tool 7: Activities of Daily Living Assessment (ADL)

Index of independence in ADL

What for ?	Assessing autonomy in daily activities
By whom ?	Nurse or medical doctor
How long ?	10 minutes

ACTIVITIES Points (0-6)	INDEPENDENCE (1 Point) NO supervision, direction or personal assistance	DEPENDENCE (0 Points) WITH supervision, direction, personal assistance or total care
BATHING Points-----	(1 POINT) Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity.	(0 POINTS) needs help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing.
DRESSING Points-----	(1 POINT) Gets clothes from closet and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.	(0 POINTS) Needs help with dressing self or needs to be completely dressed.
TOILETING Points-----	(1 POINT) Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.	(0 POINTS) Needs help transferring to the toilet, cleaning self or uses bedpan or commode.
TRANSFERRING Points-----	(1 POINT) Moves in and out of chair unassisted. Mechanical transferring aides are acceptable.	(0 POINTS) Needs help in moving from bed to chair or requires a complete transfer.
CONTINENCE Points-----	(1 POINT) Exercises complete self control over urination and defecation.	(0 POINTS) Is partially or totally incontinent of bowel or bladder.
FEEDING Points-----	(1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person.	(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.
TOTAL POINTS = _____ 6 = High (patient independent) 0 = Low (patient very dependent)		

Source: Katz S, Down TD, Cash HR, Grotz RC. Progress in the development of the index of ADL. *The gerontologist* 1970 10(1), 20-30.

Main domains of elderly health



Medical domain.

Cognitive domain and dementia.

Psychological domain and depression.

Communication barriers.

Social domain.

Medical domain

Falls and Strength, Balance,
and Gait Impairment

Appropriate Medication Use.

Nutrition.

Preventive Services.

Incontinence.

Falls and strength, balance, and gait impairment

- Falls are the leading cause of nonfatal injuries and unintentional injury and death in older persons.
- Every older person should be asked about falls at least annually. Because strength, gait, and balance impairments commonly contribute to fall risk, it is important to evaluate each of these as well as other risk factors, including visual impairment, medications, and home safety.

Appropriate medication use

- Older persons may have many of the same medical problems as younger persons, including diabetes, heart failure, and chronic kidney disease, a higher percentage of older adults have multiple chronic conditions, which, in turn, results in more medications and therefore higher risks associated with adverse drug reactions and drug-drug interactions.



Nutrition.

- Nutritional problems among older adults include obesity, undernutrition, and specific vitamin and nutrient deficiencies. Loss of 5% of body weight in 1 month or 10% of body weight over 6 months is associated with increased morbidity and mortality and should trigger further evaluation.

- **Evaluation includes consideration of:**

1. Oral health issues (eg, loss of dentures).
2. Medical issues (eg, dementia or malignancy).
3. Social issues (eg, loss of transportation).

- Increasingly, obesity is becoming a problem in older adults and is associated with multiple morbid conditions, including diabetes, osteoarthritis, poor mobility, and obstructive sleep apnea.



Preventive Services

1. Counseling on healthy behaviors.
2. Screening to detect asymptomatic disease.
3. Vaccinations.
4. Specific preventive interventions for an individual patient should be based on **evidence-based guidelines, the patient's estimated life expectancy, and the patient's values and goals.**

Incontinence

- Incontinence in older adults is common but often goes unmentioned by patients. Women are twice as likely as older men to be incontinent; overall, approximately 6% to 14% of older women experience incontinence daily.
- Ask a simple question, such as, “Is inability to control your urine a problem for you?” or “Do you have to wear pads or diapers because of urine leakage?” Positive answers should be followed up with a more complete assessment.




- Incontinence may contribute to falls, especially nocturnal incontinence when poor lighting combined with existing visual impairment may magnify the risk.

FRIENDS
ADULT DIAPERS

Follow Us On  

Home Modifications for Managing Functional Incontinence

Functional incontinence is the involuntary loss of urine caused by difficulties in reaching or using the toilet on time. Often, simple environmental changes such as those listed below can help!

- 
Remove any obstacles or tripping hazards.
- 
Install grab bars in the bathroom.
- 
Use raised toilet seats
- 
Install bright lighting in bathrooms and other key areas.
- 
Install non-slip mats or bathroom floors.
- 
Wear easy-to-remove clothing.



Cognitive domain and dementia

- The cognitive domain evaluation aims to differentiate normal versus abnormal brain aging. In normal brain aging, reaction time, mental processing speeds, name and word retrieval, and multitasking may become slower or more difficult but may still be considered normal age-related cognitive decline.
- Cognitive status includes **executive function, memory, orientation, and visual-spatial ability.**

- Cognitive impairment places older persons at risk for functional decline, medication errors, and environmental hazards, and creates a significant stress on care givers.



Screening of dementia



- 1. The Mini-Cog**, a three-item recall and clock drawing activity, is a brief screen that is sensitive for detecting dementia.
- 2. Montreal Cognitive Assessment (MOCA).**
- 3. The Mini-Mental Status Exam (MMSE)** may be useful in screening for more advanced cognitive impairment but is generally less sensitive for detecting mild cognitive impairment.

Psychological domain and depression

- Many older adults find old age to be a time of fulfillment and happiness. However, personal losses, illness, and other challenges may contribute to sadness, grief, anxiety, or depression. Therefore, questions about mood should be part of every geriatric assessment.
- In ill and hospitalized older patients, the prevalence of depression may exceed 25%.

Communication barriers



Vision impairment.



Hearing impairment.

Vision Impairment

- The prevalence of cataract, age-related macular degeneration, glaucoma, and need for corrective lenses increases with advancing age.
- For individuals with balance problems and fall risk factors, bifocal lenses should be discouraged because they make depth perception more difficult, particularly when stairs and increase risk of falls.

Hearing Impairment

- More than 33% of individuals older than 65 years and 50% of those older than 85 years have some hearing loss.
- Hearing loss is associated with social and emotional isolation, clinical depression, accelerated cognitive decline, and limited activity.

Social domain



Care giver support



Financial, environmental, and
Social resources

Caregiver Support

- High levels of functional dependence place an enormous burden on a caregiver. Burnout, depression, and poor self-care are possible consequences of high caregiver loads. Asking the caregiver about stress, burnout, anger, and guilt is often instructive.

Financial, Environmental, and Social Resources

- Older persons are at particular risk of social isolation and poverty. Screening questions about social contacts and financial resources are often helpful in guiding providers in designing realistic treatment and social service planning.

SUMMARY

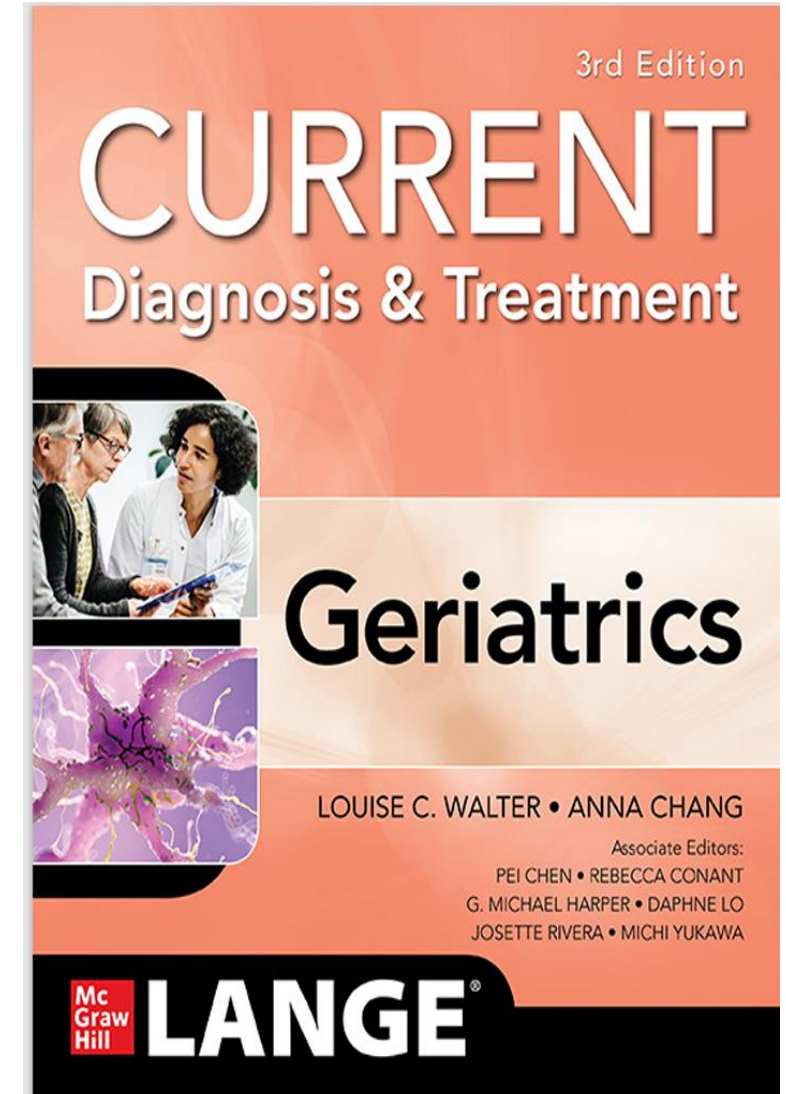
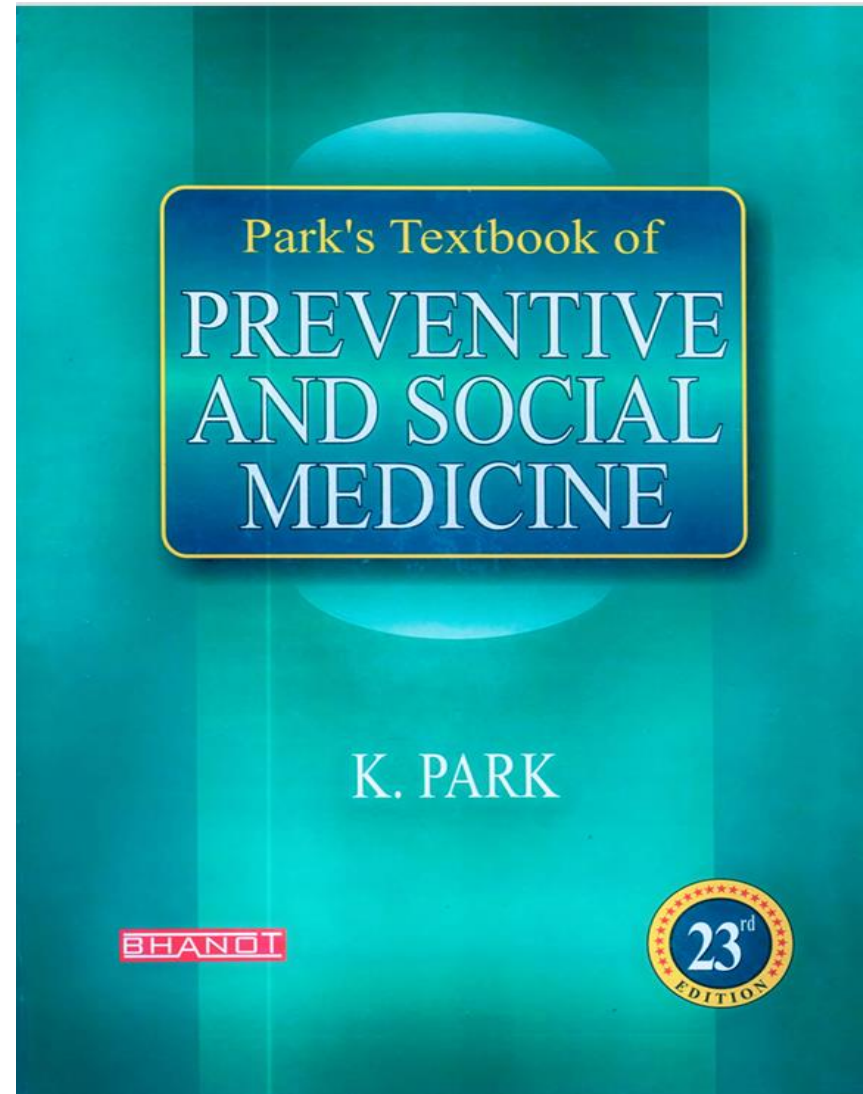


- Multimorbidity & complexity are the rule, not the exception.
- Function & cognition > chronological age in predicting outcomes.
- Always assess ADLs, IADLs, and cognitive status.
- Use the 5M's framework.
- Avoid polypharmacy.
- Clinical decisions must consider prognosis & life expectancy.
- Geriatric care = whole-person, team-based, goal-directed care.



- Which of the following factors is considered a better predictor of health outcomes in older adults than chronological age alone?
 - A. Number of medications taken
 - B. Cognitive and functional status
 - C. Body mass index
 - D. Blood pressure level

References



Thank

you

