

Cognition & Mental Health Assessment of Older Adults



Objectives

- To briefly understand age-related cognitive and emotional changes
- To apply key **Screening Tools for Cognitive Dysfunction**; Mini-Mental State Examination (MMSE), Montreal Cognitive Assessment (MoCA) and for **Mental Health**; Geriatric Depression Scale (GDS), Hamilton Depression Scale and Identifying signs of dementia, delirium, depression, loneliness, fear

Importance of Cognitive & Mental Health Assessment in Older Adults

Early detection of dementia and Mild Cognitive Impairment

Improves care planning

Identifying reversible causes and treatable conditions like depression and delirium

Promote brain health

Improve health and safety outcomes

Reduce known health related disparities and in detection and cognitive care

Normal Cognitive Aging vs Pathology

Feature	Normal Cognitive Aging	Pathological Cognitive Aging
Decline Rate	Gradual and mild	Rapid and severe
Cognitive Domains Affected	Primarily memory, executive function, processing speed	Multiple cognitive domains (memory, language, reasoning, etc.)
Functional Impact	Limited, may not affect daily life significantly	Substantial, interferes with daily activities
Brain Pathology	Mild functional changes, mostly in prefrontal cortex and basal ganglia	Accumulation of amyloid plaques and neurofibrillary tangles, affecting multiple brain regions
Risk Factors	Modifiable (hypertension, diabetes, etc.) and non-modifiable (age)	Primarily non-modifiable (age, genetics)

Common Mental Health Issues in Older Adults

Depression:

Depression is not a normal part of aging and is often under-diagnosed and under-treated in older adults. Symptoms can mimic memory loss or other physical ailments, making it difficult to identify.

Anxiety:

Older adults may experience anxiety related to aging, fears about finances, ageism, or the loss of independence. Physical health changes can also trigger anxiety.

Dementia (including Alzheimer's):

Dementia is an umbrella term for a decline in cognitive function that can impact memory, thinking, and problem-solving. Alzheimer's is a specific type of dementia.

Common Mental Health Issues in Older Adults

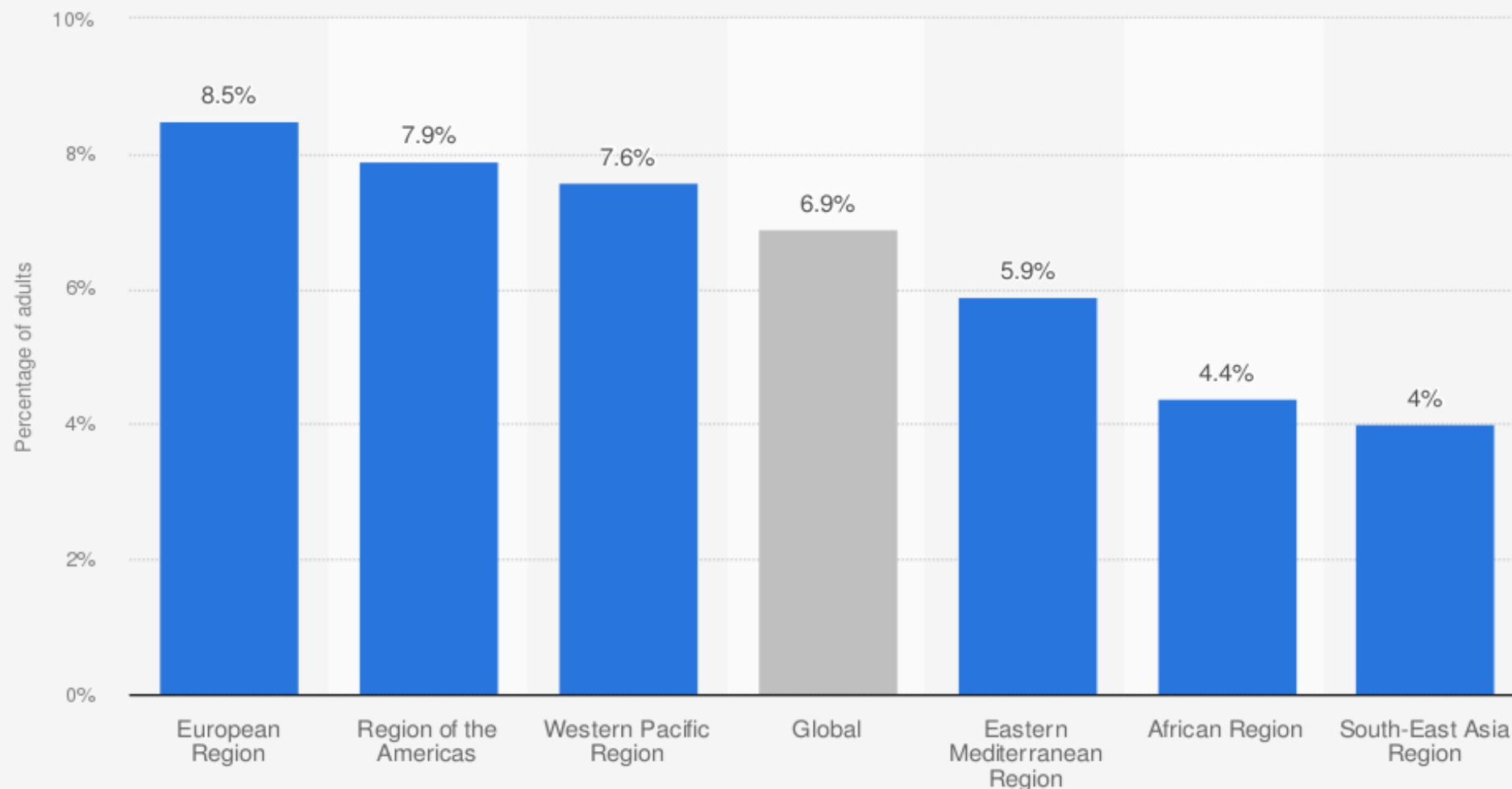
Substance Abuse:

Older adults are also susceptible to substance abuse, including alcohol and drug addiction, often due to factors like loneliness, social isolation, or loss of loved ones.

Other Mental Health Issues:

While less common, other mental health issues like bipolar disorder and schizophrenia can also affect older adults, although their onset is often later in life.

Prevalence of dementia among adults aged over 65 years worldwide as of 2019, by region



Sources

WHO; IHME (Global Burden of Disease (GBD))
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Additional Information:

Worldwide; WHO; IHME (Global Burden of Disease (GBD)); 2019; 66 years and older

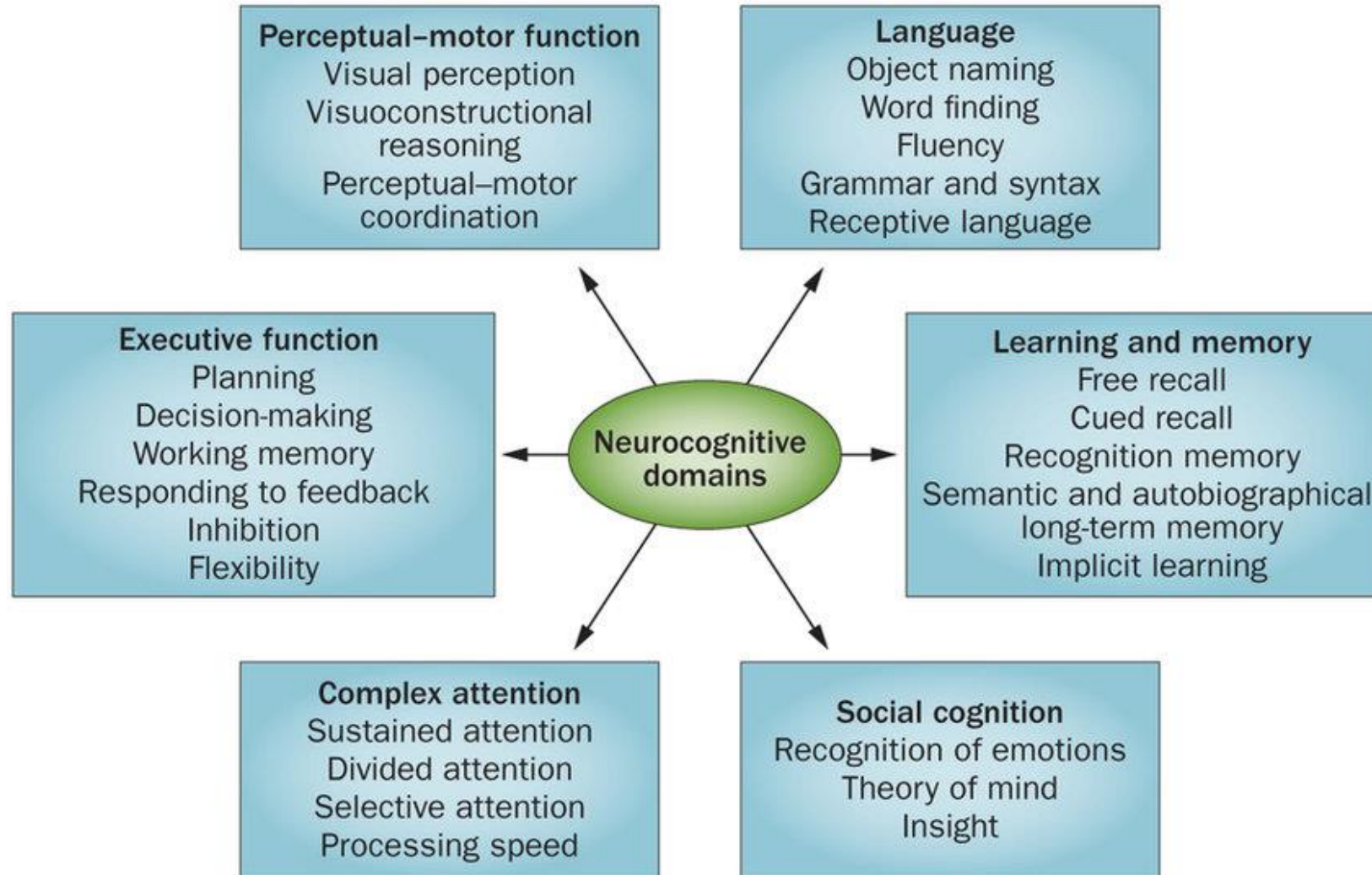
Components of Mental Status Assessment

- Alertness / Level of Consciousness
- Attention
- Comprehension
- Construction
- Emotional Status
- Higher Memory Function
- Insight
- Intelligence
- Judgment
- Memory
- Orientation to time, place, and person
- Perception
- Physical appearance
- Psychomotor behavior
- Speech and language
- Thinking



Symptoms of Cognitive Impairment

- Memory loss or forgetfulness, especially recent events or important details.
- Difficulty concentrating or staying focused on tasks.
- Confusion or disorientation, especially in familiar places or routines.
- Trouble with problem solving or decision making.
- Language problems (difficulty finding the right words or understanding conversations.)
- Decreased ability to plan or organize tasks.
- Impaired judgement or reasoning.
- Changes in mood or personality, including increased irritability.
- Difficulty learning new information or skills.
- Challenges with spatial awareness or visual perception.



Overview of tools used for cognitive assessment

Mini-Mental State Examination (MMSE):

This is a widely used, brief screening tool for cognitive impairment in older adults. It assesses orientation, memory, attention, language, and visuospatial skills. The MMSE has limitations, including potential cultural and educational biases and may not be sensitive to subtle cognitive changes.

Montreal Cognitive Assessment (MoCA):

The MoCA is another commonly used tool that provides a more comprehensive assessment of cognitive function. It evaluates visuospatial/executive function, naming, memory, attention, language, abstraction, and delayed recall. The MoCA is longer than the MMSE and may be more challenging to administer in primary care settings.

Overview of tools used for Mental Health & Cognitive assessment

Mini-Cog:

This brief test combines a three-word recall task and a clock drawing test. The Mini-Cog is suitable for use with individuals of varying educational levels, age ranges, and language differences. It can be helpful in distinguishing between those with and without dementia.

Other tools:

In addition to the three mentioned above, other tools include the Abbreviated Mental Test Score (AMTS), the Six-Item Screener (SIS), and the Rowland Universal Dementia Assessment Scale (RUDAS).

Mini-Mental State Examination (MMSE)

- can be used to systematically and thoroughly assess mental status.
- has 11 questions that tests five areas of cognitive function: orientation, registration, attention and calculation, recall, and language.
- maximum score is 30.
- A score of 23 or lower is indicative of cognitive impairment.
- takes only 5-10 minutes to administer and is therefore practical to use repeatedly and routinely.

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