

Assessing for Dementia: A Practical Understanding and Application

Beatrice Groene, MD

October 20, 2021

Today's learning objectives are:

- 1) To understand the DSM criteria for Major Cognitive Disorder
- 2) To understand a dementia-specific history
- 3) To understand how dementia becomes primary over severe mental illness
- 4) To understand the key elements most useful in differentiating dementia primary from Severe Mental Illness (SMI) primary in a determination.

Cognitive Function

Cognitive function is how we learn.

- Attention - Being able to stay focused on something despite distractions, and long enough to get the needed information
- Perception - The information we take in with our 5 senses
- Memory- Includes short term, intermediate and long term
- Executive function- Judgement and decision-making

Executive Function

- How we make decisions, solve problems and use judgment
- The ability to make any plan (however simple) and follow an appropriate sequence of action
- Response to feedback and error correction
- Socially appropriate behavior

What are normal changes in brain function seen with aging?

The MOST COMMON symptom of a normally aging brain is SLOWER processing of information.

- An aging brain can still process NEW information, but it's slower than it used to be.
- An aging brain becomes less efficient and is forgetful for general things like names and numbers.
- Because of the forgetfulness, a normally aging brain has a greater need for information to be IN CONTEXT in order to be retrieved.

On the positive side...

- A normal aging brain retains general knowledge and vocabulary
- Retains memory for relevant, well-learned material
- Retains recall of past personal or historic events

Normal aging adults without dementia will still have decreasing brain function

- Only about 4% of normal adults between ages 65-69 will have moderate to severe memory problems (require some support)
- But that number increases to 36% by age 85
- Even without dementia, the risk for memory problems increases with age.

Ref- Federal Interagency Forum on Age-Related Statistics 2000

The Neurocognitive Disorders

- Neurocognitive disorders are disorders where impaired cognition has NOT been present from birth or very early life
- Represents a DECLINE from a previous, higher level of function
- Includes Delirium, Mild Cognitive Disorder, Major Cognitive Disorder and others.

Delirium

- Delirium is directly associated with physical medical problems.
- It is seen in patients immediately after major surgery, with infections, with high fever, in medication side effects, in drug reactions or withdrawal
- Its HALLMARK is impaired attention
- The onset is RAPID, occurring in hours or days
- The sleep-wake cycle may be disturbed
- Hallucinations are frequent
- It often resolves within 48 hours once the medical problem has been resolved.

What is the significance of delirium?

- The delirium is a SYMPTOM of a physical or medical problem that should be addressed
- A patient can have BOTH dementia and delirium; in fact, this is quite common.

Mild Neurocognitive Disorder

- There is evidence of MODEST cognitive decline from previous level of function
- The decline in function does NOT interfere with the person's independence (although there may be more effort, time, or strategies required to maintain function)
- The cognitive decline is NOT due to delirium
- The cognitive decline is NOT due to other mental disorders
- Mild Neurocognitive Disorder sometimes progresses to Dementia

Dementia is a type of Neurocognitive Disorder where:

- Major Neurocognitive Disorder = Dementia
- There is evidence of significant cognitive decline from previous function
- The decline in function interferes with the person's independence
- The person does NOT have delirium
- The symptoms are not better explained by another disorder such as depression or schizophrenia

The Most Common Dementias:

1. Alzheimer's Disease – Up to 70% of Dementias; memory and speech problems are the earliest symptoms
2. Parkinson's Disease Dementia – Up to 20% of Dementias; problems with attention and executive function are the earliest symptoms
3. Vascular Dementia – Up to 10% of Dementias; variable symptoms

What are early symptoms of dementia?

- Memory slips occur more and more often
- Social behaviors may become less appropriate
- The person may become suspicious, which can lead to isolation and avoidance of other people, even potential helpers
- A decline in personal hygiene, either from not noticing, not remembering or not caring
- Hoarding

Some Dementias Can be Reversed

- Polypharmacy- Too many medications, usually from multiple prescribers
- Drug toxicity- Cancer chemotherapy drugs often cause a temporary dementia referred to as “chemobrain”
- Vitamin B 12 deficiency- Low B 12 blood levels can cause dementia which reverses when given B 12 supplement
- Hypothyroidism - Low thyroid hormone levels can cause dementia which reverses when given thyroid hormone

Certain dementias can be somewhat improved with medical treatment

- Alcohol dependence
- Epilepsy (poorly controlled)
- Syphilis
- some infections
- Tumors
- Some brain injuries

Dementia: Timeline of Development

- An important symptom of dementia is its **SLOW TIMELINE**: developing over months or years
- It can occur more quickly after brain trauma, stroke or brain surgery
- The slow timeline of dementia is similar to the timeline of depression but different from the timeline for delirium
- Dementia may seem to have a sudden onset if the person loses a caregiver, or loses familiar environmental cues (as in evacuation or hospitalization)

Severe Mental Illnesses that Resemble Dementia

- Depression is THE most common mental illness confused with dementia
- Depression mimics dementia so well it is called “Pseudo – dementia”
- In BOTH dementia and depression:
 - Gradual onset over months
 - The attention becomes impaired
 - Mental function slows down
 - Memory declines
 - They neglect self care

How can you tell depression from dementia?

- Depression can sometimes be picked up with a thorough mental status exam
- A detailed social history also helps differentiate
- Sometimes the only way to tell is to treat the patient with antidepressants: a depression will improve but dementia won't
- Once the depression resolves, the apparent dementia symptoms resolve also

Severe mental illnesses can resemble dementia

All of the severe mental illnesses can cause temporary cognitive impairment.

- Hallucinations from psychosis interfere with attention and memory
- Delusions interfere with decision-making and may cause aggression
- Disorganized thinking can be seen in BOTH Dementia and SMI
- Disorientation can be seen in dementia, delirium and SMI

It is very important to get a mental status exam towards the END of a patient's hospitalization because we need to know WHICH symptoms improved with treatment.

If the cognitive impairments are from SMI, they will improve when the SMI is treated.

If the SMI is under good control, but the patient still has cognitive impairment, then they may have some degree of dementia..

How do we arrive at a dementia diagnosis?

1. A Dementia Specific Social History is one of the most critical elements of a dementia assessment.

- Makes it clear what the person used to be like
- When and How they started to change
- What they are like now

Dementia Specific Social History

A Dementia Specific Social History focuses on the **TIMELINE** of **CHANGES** and **DETAILS** of those changes.

- **WHEN** did they start losing self-care skills? Which did they lose first? Etc.
- **WHEN** did problem behaviors start emerging? Which appeared first? Etc.
- **WHEN** was any SMI diagnosed?

Details around Severe Mental Illness

A Dementia Specific Social History focuses on details around mental health and functional decline.

- **WHEN** was the mental health diagnosis made?
- **WHAT** was the mental health diagnosis?
- **WHAT** were the symptoms attributed to mental illness?

How do we arrive at a dementia diagnosis? cont.

2. A Mental Status Exam (MSE) by a clinician is extremely important.
 - It is best to have one at admission and again prior to discharge.
 - A “recent” MSE is one done in a week OR LESS of our receiving the application.
 - Having only the admission MSE is inadequate for a Level II determination.

How do we arrive at a dementia diagnosis? (cont'd)

3. Thorough evaluation by a medical doctor is required for a dementia diagnosis.

- The medical examination will include appropriate tests.
- CT scans and MRI results are often very helpful, but are not required.

Neurocognitive Testing

- There are 2 general types of neurocognitive testing, one is screening tests
 - Screening tests assess the POSSIBILITY that someone has a particular disorder
 - Screening tests are NOT sensitive enough to make a diagnosis
 - The purpose of screening tests is to identify patients who warrant more detailed assessment
 - A good example of a screening test is the Mini Mental State Exam (MMSE) or the MOCA. These are not diagnostic tools.

Diagnostic Neurocognitive Testing

- The other type of neurocognitive testing is diagnostic testing. It can only be done by a specialist, usually a psychologist. This testing is VERY detailed and takes several hours, covering a wide range of domains.
- It is seldom available in a general medical hospital but is extremely helpful when done by a properly trained professional.
- There is no ONE neurocognitive test diagnostic for dementia.

Best information for an uninterrupted processing of a PASRR application

- Clear psychiatric history
- Several mental status exams over time, especially recent (within ONE WEEK)
- Dementia specific social history
- Clear medical history with evaluations

Which is Primary: Dementia or SMI?

Case discussion on Mr. D.

- In his 20s hospitalized at LSU, Southeast, and others
- Diagnosed with Schizophrenia (hallucinations, paranoia, threats)
- Stabilized on meds in his 30s
- Stable in community through 40s and 50s

Here his primary diagnosis is SMI, he has no other diagnosis.

Case discussion Part 2: Mr. D

- In his early 60s he gets forgetful and confused
- He is evaluated by doctors and psychiatrists
- His SMI is under good control
- Medical exam and CT are done
- He is diagnosed with Mild Dementia

Here, his primary diagnosis is *STILL* SMI, but with an additional diagnosis of Mild Dementia.

Case discussion Part 3: Mr. D

- He gets worse over the next 3 years
- Does not always recognize familiar caregivers
- He is reluctant to take medications from “strangers”
- He develops trouble sleeping
- He wanders off during the night

Case discussion Part 4: Mr. D

- He is missing one night for 8 hours, found by police
- Brought for medical and psychiatric evaluation in ER
- SMI symptoms are still well controlled
- Medical tests and CT show worsened dementia

Case discussion Part 5: Mr. D

Now, his PRIMARY DIAGNOSIS CHANGES.

His SMI is still there (always will be) but the dementia is causing the biggest problems in his life.

He now warrants nursing facility placement, and has a PRIMARY DIAGNOSIS of DEMENTIA, with an additional diagnosis of SMI.

Summary

- We discussed the DSM criteria for Major Neurocognitive Disorder
- We discussed dementia specific social history
- We described a case where the primary diagnosis changed over time
- We discussed the key elements differentiating dementia primary from Severe Mental Illness (SMI) primary in a determination.

References

- American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, 5th Edition, Washington, D.C., 2013
- Clinical Manual of Alzheimer's Disease and Other Dementias, Edited by Weiner MF, Lipton AM, American Psychiatric Association, Washington, D.C., 2012
- Essentials of Geriatric Psychiatry, Second Edition, Edited by Glazer DG, Steffens BC, American Psychiatric Association, Washington, D.C., 2012
- Memory Loss, Alzheimer's Disease and Dementia, a Practical Guide for the Clinician, 2nd edition, Budson A.E., Solomon P.R., Elsevier, 2016