

THREE DIAGNOSTIC QUESTIONS

Suggestions for a Search for the Cause of Cognitive Impairment in an Older Adult

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TO KEEP IN MIND

1. An apparently healthy middle aged man “absent mindedly” walks into his neighbor’s house rather than his own when he comes home from work, or he forgets to attend his daughter’s high school graduation. An 86 year old woman with Alzheimer’s Disease doesn’t recognize her son when she sees him, or one morning she starts to brush the outside of her cheek with a tooth brush, instead of the teeth inside her mouth. A middle aged woman has frequent mood swings and gets suspicious or angry easily. A 72 year old man begins to climb on top of the toilet seat to squat to urinate rather than stand in front of the toilet or sit on the seat. These are **examples of possible symptoms of cognitive impairment**, particularly if they are unusual for that person and not simply a reflection of habit or cultural background.
2. When a person shows confusion or engages in a behavior atypical or uncharacteristic of that person, it is important to **search for the source** of the confusion or unusual behavior, that is, why the confusion is occurring. Is the reason for or source of the behavior and confusion, for example, stress, preoccupation, emotional distress, physical pain, a treatable physical disorder or condition, a brain tumor, a stroke, or a dementia resulting from a progressive brain disorder?
3. There are **three fundamental questions** to ask to discern the cause of a symptom of cognitive impairment in an older adult or in anyone of **any age** that shows confusion or does something uncharacteristic of that person.
4. These same three questions should be asked even if a person **already has a diagnosis** of a disorder involving cognitive impairment, such as Alzheimer’s disease.
5. These three questions should be asked at **any stage of a disorder**, whether the symptom is the first that anyone has seen or is simply a new one that might indicate progression to the next stage of a disorder, or the beginning of a new treatable disorder, such as an infection.
6. **Dementia is defined** as a decline in a person’s ability to think in a variety of ways, including, for example, loss of memory and good judgment.
7. **Dementia is a set of symptoms**, like confusion and memory loss, that may be caused by many possible brain disorders, including Alzheimer’s disease. Because dementia is the symptom, it is important to find the source or cause of the dementia. The three questions here, are asked as a part of a diagnostic evaluation to eliminate possible causes of confusion or cognitive impairment that are treatable. Once all emotional and treatable physical causes of the symptoms of a person’s cognitive impairment are eliminated as possible causes, then one asks which progressive brain disorder is causing the dementia.

THREE QUESTIONS TO ASK ABOUT THE CAUSE OF COGNITIVE IMPAIRMENT

1. **Is it emotional or a result of changes in the person’s life or environment?**
2. **Is it a treatable physical disorder or condition?**
3. **Which progressive brain disorder is it?**

Three Diagnostic Questions

This is a series of three questions to ask to diagnose a cognitive disorder or to evaluate change in a person's cognitive abilities. A health professional can use a variety of tests, including urinalysis, blood tests, imaging technology, and specialized evaluations, such as neuropsychological testing to explore these questions more thoroughly and to produce a diagnosis, with an autopsy to verify the diagnosis.

1. Emotional/External versus Physical (or both emotion/external and physical)

Is the cause emotional or a result of changes in the person's life or environment? For example:

- a. Depression
- b. Long-standing psychiatric disorder
- c. Grief (for example, loss of a spouse or an ability)
- d. Life event (for example, a move to another residence or to a nursing home)
- e. Emotions that are cyclical or seasonal, or mark an anniversary of a major event in the past
- f. Change in conditions around the person (for example, a roommate is ill or a son in trouble)
- g. Environment change or confusion (for example, unusual noise or new furniture arrangement)
- h. Different caregiver or unusual, less supportive, or confusing interactions
- i. Change in stimulation or level of activity (for example, boredom, less exercise, too busy or stressed)

**If the cause is emotional/external, then treat the emotional disorder or modify the external.
If the cause is physical, then ask the next question (#2).**

2. Treatable systemic physical/medical versus Progressive brain disorder (or both)

Is the cause a treatable physical disorder or condition? For example:

- a. Pain
- b. Medication (for example, side effects, change in dosage, interactions, noncompliance)
- c. Foods or supplements (for example, vitamins, herbal teas, topical treatments, sugar)
- d. Drug use (for example, alcohol, recreational, over the counter, prescription)
- e. Infection (for example, urinary tract infection (UTI) may be asymptomatic and frequent)
- f. Impaction or constipation
- g. Dehydration
- h. Metabolic disorder (for example, thyroid, diabetes, vitamin B12 or folic acid deficiency)
- i. Toxicity (for example, accumulation of a substance, environmental exposure)
- j. Weather exposure (for example, effects of sun, heat, cold)
- k. Tumor

**If the cause is treatable and systemic, then treat the disorder.
If the cause is a progressive irreversible brain disorder, then ask the next question (#3).**

3. Which progressive irreversible brain disorder is it? (or is there more than one?)

Which brain disorder is causing the dementia or change in cognitive abilities? For example:

- a. Stroke (in the brain, but is usually not irreversible)
- b. Alzheimer's Disease
- c. Vascular Dementia
- d. Dementia with Lewy Bodies (DLB)
- e. Frontotemporal Dementia (FTD)
- f. Others (for example, Korsakoff's, Huntington's, Parkinson's, Creutzfeldt Jakob Disease)

Watch the brain disorder for stages of progression and adapt your interventions to the person and the stage of the disorder.

FURTHER READING FOR FAMILIES & DIRECT CAREGIVERS (See recent editions):

Mace, N & Rabins, P. (1981). *The 36 Hour Day* (1st Edition). Baltimore, MD: Johns Hopkins University Press.