

# THREE QUESTIONS ABOUT CAUSE

## Suggestions for a Search for the Reasons Cognitive Changes are Occurring Now

Shelly Weaverdyck

### TO KEEP IN MIND

1. An apparently healthy middle-aged person coming home from work “absent mindedly” walks into a neighbor’s house rather than their own, or they forget to attend their child’s high school graduation. An 86 year old person with Alzheimer’s Disease doesn’t recognize their adult child when they see them. Or one morning they start to brush the outside of their cheek with a toothbrush, instead of brushing the teeth inside their mouth. A 74 year old person can’t remember what to buy at the grocery store or gets lost coming home from the store. A middle-aged person has frequent mood swings and gets suspicious or angry easily. A 72 year old person 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 evidence of possible cognitive change**, particularly if they are unusual for this person and not simply a reflection of habit or cultural background.
2. When a person shows confusion or engages in behavior atypical or uncharacteristic of this 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 or evidence of cognitive change in an older adult or in anyone of **any age** that shows confusion or does something uncharacteristic of this person.
4. These same three questions should be asked even if a person **already has a diagnosis** of a disorder involving cognitive change, 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 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 part of a diagnostic evaluation to eliminate possible causes of confusion or cognitive change that are treatable. Once all emotional, medication related, and treatable physical causes of the symptoms of this person’s cognitive changes 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 CHANGE

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

# The Three Questions

This is a series of three questions to ask to evaluate change in a person's cognitive abilities or to diagnose a cognitive disorder. 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 clinically. Ask these questions in the following order.

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

Is the cause emotional versus a result of changes in this person's life or in their 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 this person (for example, a friend is ill or a family member in trouble)
- g. Environment change or confusion (for example, unusual noise or new furniture arrangement)
- h. Someone different helping them, or interactions that are unusual, less supportive, or confusing
- i. Change in stimulation or level of activity (for example, boredom, less exercise, too busy or stressed)

**If the cause is emotional or 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 or timing, interactions, noncompliance, a new medication, or new reactions to a current medication, especially if this is an older person)
- c. Foods or supplements (for example, vitamins, herbal teas, topical treatments, sugar, caffeine, allergies)
- d. Drug use (for example, alcohol, recreational, common 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, though it may not be irreversible or progressive)
- b. Alzheimer's Disease
- c. Vascular Dementia
- d. Dementia with Lewy Bodies (DLB)
- e. Frontotemporal Dementia (FTD)
- f. Others (for example, Huntington's, Parkinson's, Creutzfeldt-Jakob Disease)

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