Cognitive Screening: Uses and Limitations

Who would have ever thought that cognitive screening would hit the headlines?

Some recent publicity about the cognitive screening tool, the MoCA -- the Montreal Cognitive Assessment -- has misrepresented the uses and limitations of cognitive screening. This article clarifies how screening tests are used clinically and responsibly.

Cognitive screening instruments, like the MoCA and the MMSE (the Mini-Mental Status Exam) are very short tests --- about ten minutes long -- used to screen very basic cognitive abilities, such as attention, memory, language and word retrieval, and spatial skills that are vulnerable to decline due to medical conditions such as dementia. The word screen is critical here -- meaning taking a quick and limited look at a few specific skills to see if there are any signs of cognitive problems. These brief screens also allow for quick comparisons over time. Repeated, periodic assessment is the most effective way to determine if a person is suffering from loss of cognitive abilities due to conditions like dementia.

Screenings are not diagnostic tools. Because they are brief, they can fail to identify a problem. Many screening tests, like the MoCA, do not measure higher level thinking abilities such as reasoning, judgment, or overall intelligence (“IQ”). Furthermore, they provide no information about personality traits or emotional state. Other, longer tests are used by neuropsychologists and other psychologists for more comprehensive and detailed assessment of an individual’s psychological and cognitive status.

No tests or screens are meant to be used alone. They are only one part of an evaluation drawn from self-report and other sources, typically medical records and people who know the person well. The history gathered should include information about education and work, as well as the person’s cognitive, emotional, social, and behavioral functioning in daily life. Brain scanning with CT scans, MRI’s, or PET scans may be part of an assessment, depending on a person’s medical history and types of problems.

All tests -- screenings and longer tests -- require careful interpretation by qualified evaluators. This is because the meaning of test scores depends on understanding many things about the person being evaluated. Test results can be influenced by factors such as education, prior exposure to the test items, cultural background, treatable medical problems, lifelong neurodevelopmental conditions such as ADHD.
or learning disability, or situational factors.

Often, when there is a question of possible cognitive decline, a team of specialists evaluates a person so that a neurologist can request and review brain scans and a neuropsychologist can thoroughly assess all cognitive, emotional, personality, and family factors.

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