A tool to assess behavioral problems in neurocognitive disorder and guide treatment

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Dr. Mahmood is speaker for Otsuka Pharmaceuticals.

Non-drug treatment options, such as behavioral techniques and environment adjustment, should be considered before initiating pharmacotherapy in older patients with behavioral deregulation caused by a neurocognitive disorder. Before considering any interventions, including medical therapy, an evaluation and development of a profile of behavioral symptoms is warranted.

The purpose of such a profile is to:

- guide a patient-specific treatment plan
- measure treatment response (whether medication-related or otherwise).

Developing a profile for a patient can lead to a more tailored treatment plan. Such a plan includes identification of mitigating factors for the patient's behavior and use of specific interventions, with a preference for non-medication interventions.

Profile assessment can guide treatment

The disruptive-behavior profile that I created (***Table, page e2***) can be used as an initial screening device; the score (1 through 4) in each domain indicates the intensity of intervention required. The profile also can be used to evaluate treatment response.

For example, when caring for a person with a neurocognitive disorder with agitation and disruptive behavior, this profile can be used by the caregiver as a reporting tool for the behavioral heath professional providing consultation. Based on this report, the behavioral health professional can evaluate the predisposing, precipitating, and perpetuating factors of the behavioral disturbance, and a treatment plan can be implemented. After interventions are applied, follow-up assessment with the tool can assess the response to the intervention.

The scale can aid in averting overuse of non-specific medication therapy and, if required, can guide pharmacotherapy. This assessment tool can be useful for clinicians providing care for patients with a neurocognitive disorder, not only in choosing treatment, but also to justify clinical rationale.

How does this scale compare with others?

The Neuropsychiatric Inventory (NPI), Behavioral Pathology in Alzheimer's Disease (Behave-AD), Cohen-Mansfield Agitation Inventory, and Brief Agitation Rating Scale provide valuable information for clinical care. However:

- Use of the NPI in everyday practice is limited; time spent completing the NPI scale remains a significant impediment for the busy clinician.
- Behave-AD requires a higher level of skill for some caregivers to estimate behavioral symptoms and answer questions about severity.

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• Cohen-Mansfeld and Brief Agitation Rating Scale provide a limited description of the intensity of behavioral disturbance.

Developing a treatment plan and justifying pharmacotherapy in patients with a neurocognitive disorder is a challenge for clinicians. The scale that I developed aims to (1) assist the busy clinician who must construct a targeted treatment plan and (2) avoid pharmacotherapy when it is unnecessary. If pharmacotherapy is warranted on the basis of any of the domain scores in the profile, it should be documented with a judicious rationale.

Table

Disruptive behavior profile in neurocognitive disorder

Behavior	Intensity rating			
Non-physical disruption				
Screaming or yelling	1	2	3	4
Cursing	1	2	3	4
Irrationally demanding or condescending	1	2	3	4
Repetitively questioning or complaining	1	2	3	4
Refusing to follow direction for appropriate care (eg, removing oxygen, refusing measurement of vital signs, refusing hygiene care)	1	2	3	4
Refusing medication	1	2	3	4
Non-aggressive physical disruption				
Disrobing or inappropriately exposing	1	2	3	4
Hoarding	1	2	3	4
Hiding	1	2	3	4
Pacing	1	2	3	4
Place-inappropriate voiding or defecation	1	2	3	4
Inappropriate physical intrusion	1	2	3	4
Aimless wandering	1	2	3	4
Wandering with exit seeking	1	2	3	4
Aggressive physical disruption				
Hitting	1	2	3	4
Biting	1	2	3	4
Kicking	1	2	3	4
Scratching	1	2	3	4
Grabbing (sexual)	1	2	3	4
Grabbing (non-sexual)	1	2	3	4
Throwing objects	1	2	3	4
Perception				
Talking to unknown stimuli	1	2	3	4
Physical response or gesturing to unknown stimuli	1	2	3	4
Reporting visual hallucinations (eg, dog running in the room)	1	2	3	4
Paranoid delusions (eg, food is poisoned)	1	2	3	4
Delusional misidentification of others (eg, a peer is his [her] child or spouse)	1	2	3	4

continued

This profile aims to help busy clinicians implement a patient-specific treatment plan and measure response

Disruptive behavior profile in neurocognitive disorder (continued)

Behavior	Intensity rating			
Affect				
Apathy (not interested but does not appear depressed)	1	2	3	4
Irritable	1	2	3	4
Angry	1	2	3	4
Tearful or glum	1	2	3	4
Sleep				
Nighttime sleep	<2 hours	2 to 5 hours	>5 hours	
Daytime sleep	<2 hours	2 to 5 hours	>5 hours	

Note:
1. **Mild disruption**. Does not cause a disturbance in his (her) environment. Behavior does not cause significant disruption in care by staff or family members.
2. **Moderate disruption.** Disrupts the patient and his surrounding milieu. Causes self and peers anxiety and distress. Behavior inclines peers to be disruptive. Requires staff's verbal intervention.
3. **Severe disruption.** Patient shows physical aggression and severe distress that significantly disrupt him (her) and his peers, staff, and milieu; causes peers to act out. Requires physical manipulation of environment, including removing him and his peers to other locations. Behavior causes profound frustration to care providers (family members, staff). Hallucinatory experiences lead to physical aggression. Paranoia leads to physical aggression, refusal to eat.
4. **Dangerous behavior.** Violent actions by patient toward self and others. All behaviors require physical restraint.