



Addressing Caregiver Burden and Identifying Agitation Associated With Dementia Due To Alzheimer's Disease

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Objectives



Define caregiver burden and its impact on daily life and their ability to provide care to individuals with Alzheimer's dementia

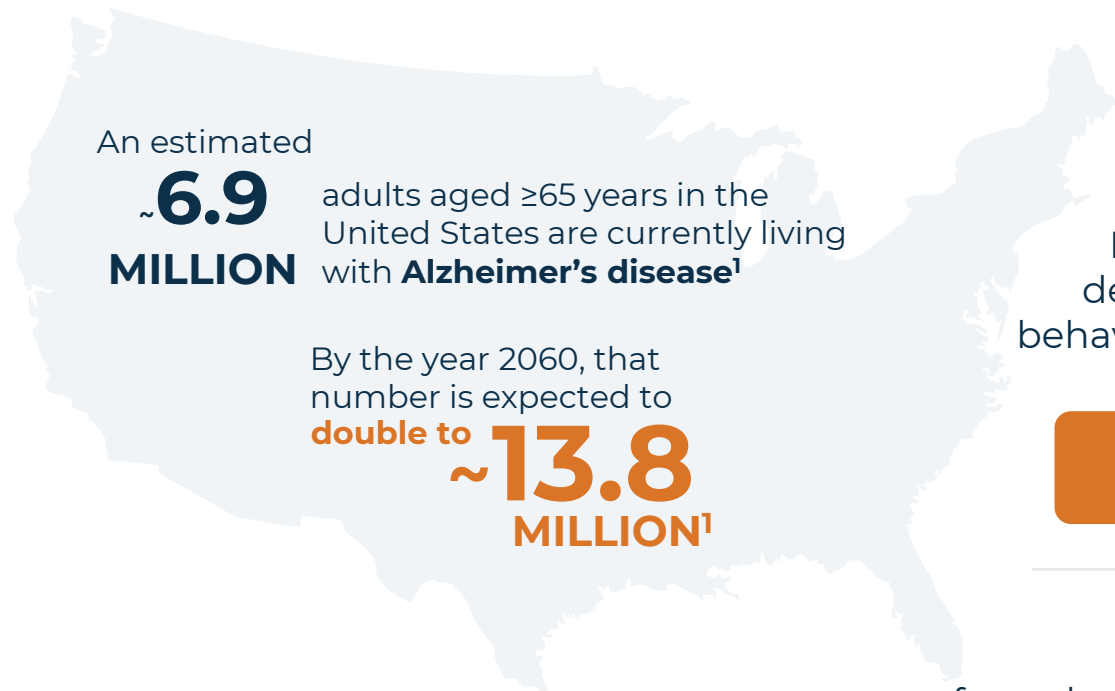


Examine challenges in recognizing agitation associated with dementia due to Alzheimer's disease



Share the Agitation In Alzheimer's Screener For Caregivers (AASC®) and the Caregiver's Guide On Identifying And Managing Agitation Associated With Alzheimer's Dementia resources

Alzheimer's Dementia Is Highly Prevalent And Predicted To Increase Over Time¹



People with Alzheimer's dementia can experience behavioral and psychological conditions, with

agitation being one of the most common²

Agitation is present in ~1 out of 2

individuals with dementia due to Alzheimer's disease

Agitation is associated with increased chances of placement into long-term care (LTC)³

~65% of people with Alzheimer's or other forms of dementia lived **in the community**, receiving more care from family members and other unpaid caregivers as their disease progressed¹

~75% of people with Alzheimer's dementia at age 80 live in an **LTC facility** compared with 4% of the general population aged 80 years¹

References:

1. 2024 Alzheimer's disease facts and figures. *Alzheimers Dement.* 2024;20(5):3708-3821.
2. Halpern R, et al. *Int J Geriatr Psychiatry.* 2019;34(3):420-431.
3. Fillit H, et al. *Int J Geriatr Psychiatry.* 2021;36(12):1959-1969.

Agitation Presents A Broad Spectrum Of Symptoms

- Agitation associated with dementia due to Alzheimer's disease is a **common and treatable condition** with a broad range of symptoms. It requires distinct treatment options from those used for cognitive impairment¹⁻³
- Despite its prevalence, **agitation is often under-recognized** by caregivers and underdiagnosed by HCPs⁴⁻⁶

Symptoms of **agitation** manifest as both **non-aggressive** and **aggressive** behaviors, such as^{7,8}

EXCESSIVE MOTOR ACTIVITY:

Pacing, restlessness, repetitiveness, and gesturing



VERBAL AGGRESSION:
Screaming, using profanity, and asking repetitive questions

PHYSICAL AGGRESSION:
Hitting, kicking, punching, biting, and throwing things

HCP, health care provider.

References:

1. Cummings J, et al. *Int Psychogeriatr*. 2015;27(1):7-17.
2. Cohen-Mansfield J. Instruction manual for the Cohen-Mansfield Agitation Inventory (CMAI). Research Institute of the Hebrew Home of Greater Washington; 1991.
3. Gilmore-Bykovskiy A, et al. *Gerontologist*. 2020;60(5):896-904.
4. Halpern R, et al. *Int J Geriatr Psychiatry*. 2019;34(3):420-431.
5. Lanctôt KJ, et al. *Alzheimers Dement (N Y)*. 2017;3(3):440-449.
6. Stella F, et al. *Int J Geriatr Psychiatry*. 2015;30(12):1230-1237.
7. Sano M, et al. *Int Psychogeriatr*. 2024;36(4):238-250.
8. Rabinowitz J, et al. *Am J Geriatr Psychiatry*. 2005;13(11):991-998.

Agitation Can Worsen The Impact Of An Already Devastating And Burdensome Disease

Overall, agitation versus no agitation in patients with Alzheimer's dementia has been associated with¹⁻⁷:



Accelerated
disease
progression



Functional
decline



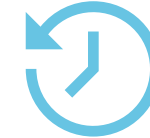
Decreased
quality of life



Greater
comorbidities



Increased use
of concomitant
therapies



Earlier
death



Increased
risk of
hospitalization/
institutionalization

In the LTC setting, agitation versus no agitation has been associated with a significantly increased risk of¹:



Falls



Fractures



Infections



Higher medication use



Other NPS*

*Includes depression, anxiety, delusion, and hallucinations.
LTC, long-term care; NPS, neuropsychiatric symptoms.

References:

1. Fillit H, et al. *Int J Geriatr Psychiatry*. 2021;36(12):1959-1969.
2. Jones E, et al. *J Alzheimers Dis*. 2021;83(1):89-101.
3. Halpern R, et al. *Int J Geriatr Psychiatry*. 2019;34(3):420-431.
4. Koenig AM, et al. *Curr Psychiatry Rep*. 2016;18(1):3.
5. Peters ME, et al. *Am J Psychiatry*. 2015;172(5):460-465.
6. Scarmeas N, et al. *Arch Neurol*. 2007;64(12):1755-1761.
7. Banerjee S, et al. *J Neurol Neurosurg Psychiatry*. 2006;77(2):146-148.

Agitation Has Been Associated With Caregiver Burden, Which Increases With Severity of Alzheimer's Dementia¹

Many professional caregiving themes parallel those of family caregiving,² including caregiver outcomes³⁻⁹:



General
health
decline



Reduced
quality
of life



Depression



Anxiety



Embarrassment
and guilt



Social
isolation



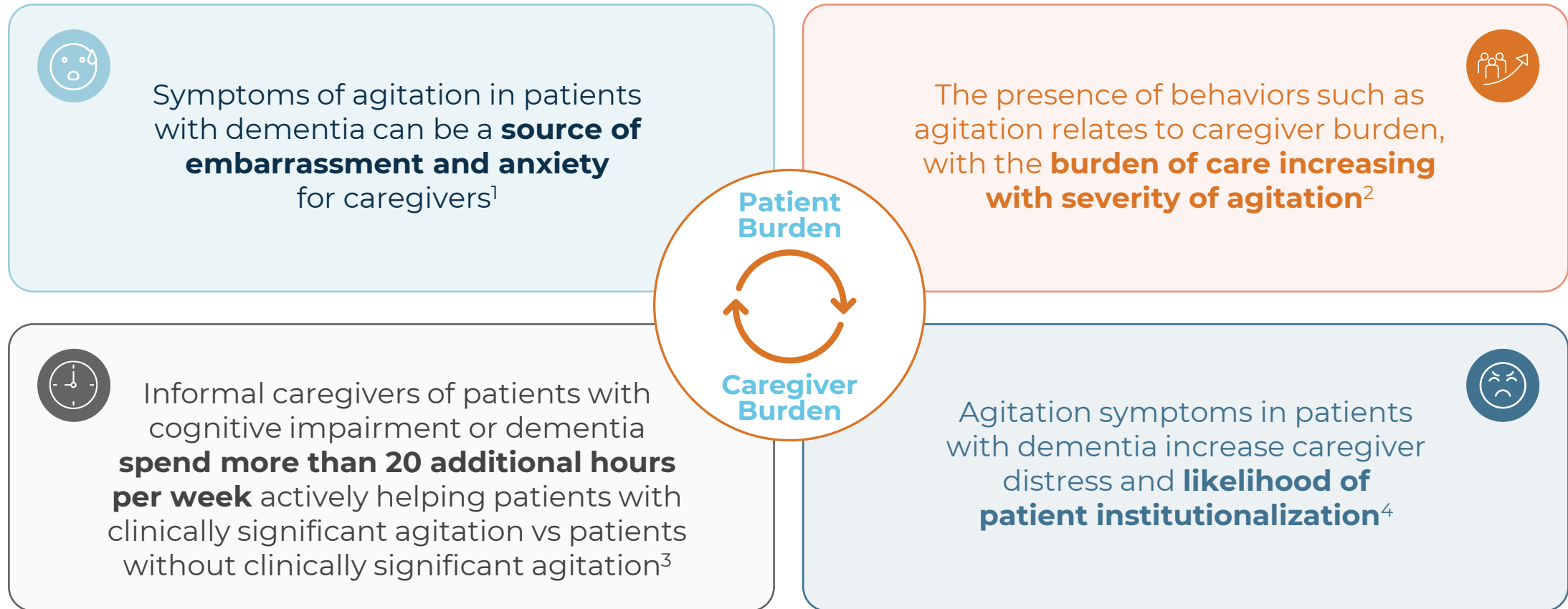
Increased
use of
clinical
services

Agitation is a risk factor for **burnout, reduced workability,**
and **generally weaker health** among caregivers¹⁰

References:

1. Schein J, et al. *J Alzheimers Dis.* 2022;88(2):663-677.
2. McCarty EF, Drebing C. *J Nurses Staff Dev.* 2002;18(5):250-257.
3. Kales HC, et al. *BMJ.* 2015;350:h369.
4. Mohamed S, et al. *Am J Geriatr Psychiatry.* 2010;18(10):917-927.
5. Isik AT, et al. *Int J Geriatr Psychiatry.* 2019;34(9):1326-1334.
6. Brodaty H, Hadzi-Pavlovic D. *Aust N Z J Psychiatry.* 1990;24(3):351-361.
7. Thomas P, et al. *Int J Geriatr Psychiatry.* 2006;21(1):50-56.
8. Patrick KS, et al. *Psychogeriatrics.* 2022;22(5):688-698.
9. Cohen-Mansfield J. *J Psychiatr Res.* 2008;43(1):64-69.
10. Palm R, et al. *J Alzheimers Dis.* 2018;66(4):1463-1470.

Agitation In Patients With Alzheimer's Dementia Is Associated With High Caregiver Burden



References:

1. Cohen-Mansfield J. *J Psychiatr Res.* 2008;43(1):64-69.
2. Schein J, et al. *J Alzheimers Dis.* 2022;88(2):663-677.

3. Okura T, Langa KM. *Alzheimer Dis Assoc Disord.* 2011;25(2): 116-121.
4. Fillit H, et al. *Int J Geriatr Psychiatry.* 2021;36(12):1959-1969.

Burnout Has Been Recognized As An Occupational Hazard For Both Professional And Family Caregivers^{1,2}

Multiple assessments have been created to **characterize burnout based on physical, mental, and emotional aspects**³⁻⁵

These 3 examples can be used to define burnout in caregivers of patients with Alzheimer's dementia:



Maslach Burnout Inventory³

- ✓ Overwhelming exhaustion
- ✓ Feelings of cynicism and detachment from the job
- ✓ Sense of ineffectiveness and lack of accomplishment



Burnout Measure⁴

- ✓ Physical exhaustion
- ✓ Mental exhaustion
- ✓ Emotional exhaustion



ICD-11 of the WHO⁵

- ✓ Feelings of energy depletion or exhaustion
- ✓ Increased mental distance from one's job, or feelings of negativism or cynicism related to one's job
- ✓ Reduced professional efficacy

ICD-11, International Classification of Diseases, 11th Revision; WHO, World Health Organization.

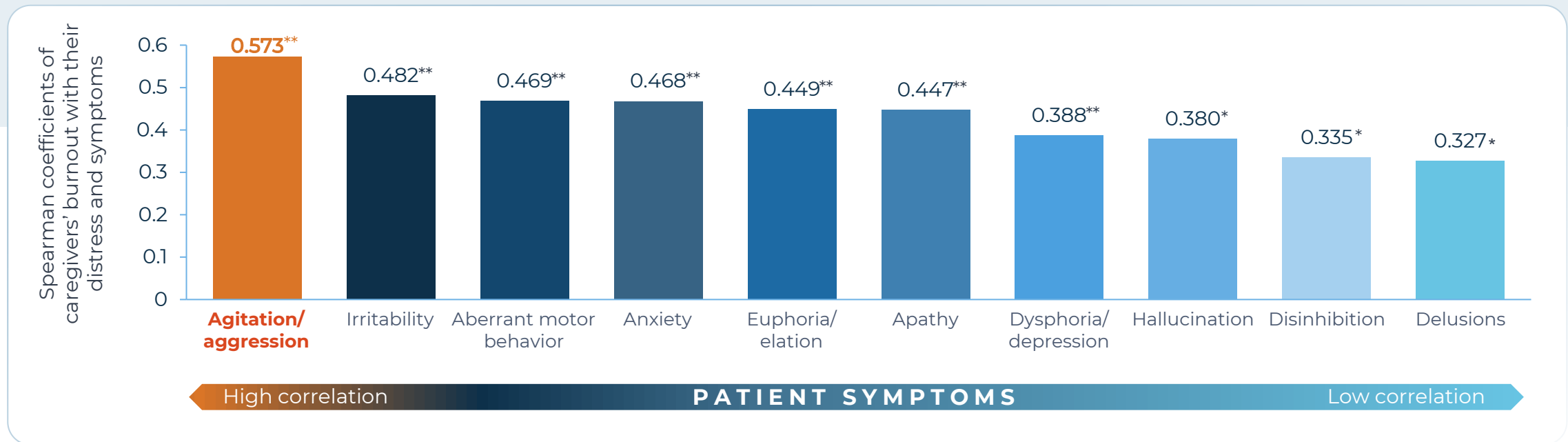
References:

1. Hiyoshi-Taniguchi K, et al. *Clin Gerontol*. 2018;41(3):249-254.
2. Palm R, et al. *J Alzheimers Dis*. 2018;66(4):1463-1470.
3. Maslach C, Leiter MP. *World Psychiatry*. 2016;15(2): 103-111.

4. Malach-Pines A. *Int J Stress Manag*. 2005;12(1):78-88.
5. World Health Organization. Burn-out an "occupational phenomenon": International Classification of Diseases. Published May 28, 2019. Accessed March 11, 2025. <https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases>.

Among Behaviors Observed In Patients With Dementia, Agitation Has Been Shown To Have The Strongest Correlation With Caregiver Burnout

Correlation Of Burnout Scores With Caregiver Distress By Dementia Symptom



Caregivers experienced **higher burnout** when patients showed behaviors such as **agitation/aggression**, irritability, and aberrant motor behavior vs more passive symptoms like apathy, depression, and delusions

* $P < 0.05$; ** $P < 0.01$.

Hiyoshi-Taniguchi K, et al. *Clin Gerontol*. 2018;41(3):249-254.

Despite The High Prevalence, Recognition Of Agitation Remains A Challenge That Delays Diagnosis And Treatment



Caregivers

- Often the **first to encounter** agitation symptoms¹
- **May not recognize** the full breadth of agitation symptoms¹
- **May not understand** that treatment of agitation differs from treatment of Alzheimer's dementia¹
- **May not readily talk** about agitation symptoms with HCPs until they become untenable, which can lead to underdiagnosis of agitation^{1,2}



HCPs

- **Often rely on caregivers** to report agitation symptoms³
- **Agitation symptoms may not be easy to detect** in a clinical setting, especially when subtle³
- **Generally, may not educate** families about agitation early in Alzheimer's dementia²
- **May not be made aware** of agitation symptoms until burden becomes untenable for the caregiver²

Caregivers play a critical role in recognizing, assessing, and communicating agitation symptoms to HCPs.¹



Early Detection:

*Improving caregiver recognition and communication with HCPs may lead to **earlier diagnosis and timely management**³*

Early detection by caregivers with tailored tools may³:

- Improve recognition and overall management of agitation in patients with Alzheimer's dementia
- Encourage discussions with HCPs about agitation symptoms
- Assist HCPs in making a diagnosis of agitation associated with dementia due to Alzheimer's disease

HCP, health care provider.

1. Clevenger C, et al. One minute to recognition: The Agitation in Alzheimer's Screener for Caregivers (AASC®). Presented at: Gerontological Society of America Annual Scientific Meeting; November 8-12, 2023; Tampa, FL.
2. Richler LG, et al. *Harv Rev Psychiatry*. 2023;31(1):22-27.

3. Stella F, et al. *Int J Geriatr Psychiatry*. 2015;30(12):1230-1237.
4. Gilmore-Bykovskiy A, et al. *Gerontologist*. 2020;60(5):896-904.

The Agitation In Alzheimer's Screener For Caregivers (AASC®)

The AASC® was developed based on the IPA definition to empower caregivers and HCPs in discussing, identifying, and reporting agitation in patients with Alzheimer's dementia

Goals of the AASC®

- To **educate caregivers** about agitation symptoms
- To **facilitate caregiver-HCP conversations** about agitation
- To **help HCPs** in **screening for agitation** in Alzheimer's

AASC®
Agitation in Alzheimer's Screener for Caregivers

A person with Alzheimer's dementia may become easily upset, frustrated, or angry. These feelings may be associated with agitation, a common symptom of Alzheimer's. The following questions ask about behaviors associated with agitation that you may have observed in the individual for whom you provide care. Your answers to these questions can help you talk with your person's healthcare professional. Please select one response for each question.

Patient Name _____ Date _____

1. Are you noticing any of the following that represent a change from the individual's usual or past behavior?

	Yes	No
a. Repeating motions or behaviors (e.g., rocking, raking fist, pointing finger)	<input type="checkbox"/>	<input type="checkbox"/>
b. Pacing or restlessness (cannot be still)	<input type="checkbox"/>	<input type="checkbox"/>
c. Cursing/using profanity or lashing out verbally	<input type="checkbox"/>	<input type="checkbox"/>
d. Raising voice or yelling or screaming	<input type="checkbox"/>	<input type="checkbox"/>
e. Resisting assistance or care	<input type="checkbox"/>	<input type="checkbox"/>
f. Throwing or hitting or breaking things	<input type="checkbox"/>	<input type="checkbox"/>
g. Trying to hurt self or others (e.g., grabbing, kicking, hitting, biting)	<input type="checkbox"/>	<input type="checkbox"/>

2. Do any of these behaviors make the individual's day-to-day activities or interactions with others more challenging?

	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>

Disclaimer: This screener was developed by Otsuka Global Medical Affairs along with a panel of multidisciplinary experts and was validated by Otsuka Pharmaceutical Development & Commercialization, Inc. The AASC® is a screening tool and is not a diagnostic tool.

Agitation criteria based on the International Psychogeriatric Association (IPA) definition (Sano et al., 2023).

References: 1. Greenberg G, et al. Validation of the Agitation in Alzheimer's Screener for Caregivers (AASC®), a Novel Clinical Tool to Screen for Agitation in Alzheimer's Dementia. The American Association of Geriatric Psychiatry (AAGP) Annual Meeting, March 14-17, 2023; Phoenix, AZ. 2. Sano M, Caverlingo J, Auer S, et al. *Int Psychogeriatr*. 2023;1-15.

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The AASC® is the **first clinical tool based on IPA criteria**

Items screen for both the **presence and impact** of agitation symptoms

Can be completed in **<1 minute**

Simple to score

Use the digital version or download and print the AASC® at **www.theaasc.com**



HCP, healthcare provider; IPA, International Psychogeriatric Association.

Reference:

1. Clevenger C, et al. One minute to recognition: The Agitation in Alzheimer's Screener for Caregivers (AASC™). Presented at: Gerontological Society of America Annual Scientific Meeting; November 8-12, 2023; Tampa, FL.

IPA Definition

The IPA definition of agitation in cognitive disorders includes 4 criteria¹:

1. The patient meets the criteria for cognitive impairment or dementia syndrome
2. The patient exhibits ≥ 1 agitation behavior(s) with emotional duress that is persistent or frequently recurrent for ≥ 2 weeks or the behavior represents a dramatic change from the patient's usual behavior*
3. The behaviors are severe and associated with excess distress or produce disability beyond that due to cognitive impairment
4. The behaviors cannot be attributed to another psychiatric disorder, medical condition, including delirium, suboptimal care conditions, or the physiological effects of a substance

Agitation behaviors include¹:



Excessive motor activity behaviors:

- Pacing
- Rocking
- Gesturing
- Pointing fingers
- Restlessness
- Performing repetitious mannerisms



Verbal aggression behaviors:

- Yelling
- Speaking in an excessively loud voice
- Using profanity
- Screaming
- Shouting



Physical aggression behaviors:

- Grabbing
- Shoving
- Pushing
- Resisting
- Hitting others
- Kicking objects or people
- Scratching
- Biting
- Throwing objects
- Hitting self
- Slamming doors
- Tearing things
- Destroying property

*In special circumstances, the ability to document the behaviors over 2 weeks may not be possible and other terms of persistence and severity may be needed to capture the syndrome beyond a single episode.

IPA, International Psychogeriatric Association.

Reference:

1. Sano M, et al. *Int Psychogeriatr*. 2024;36(4):238-250.

Summary



Agitation associated with dementia due to Alzheimer's disease is a common and treatable condition with a broad range of non-aggressive and aggressive symptoms, including excessive motor activity, verbal aggression, and physical aggression



Agitation in patients with Alzheimer's dementia is associated with high caregiver burden long-term consequences



Caregiver burnout has been recognized as an occupational hazard, with multiple assessments currently available to characterize burnout based on physical, mental, and emotional aspects



Despite the high prevalence of agitation, its recognition remains a challenge that may delay diagnosis and treatment



A new screening tool may facilitate early detection of agitation by caregivers. Early detection may improve overall management of agitation in patients with Alzheimer's dementia

For more information or to request a more detailed live presentation on this topic from your local Medical Science Liaison, please visit www.PsychU.org/contact

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