

Management of Behavioral and Psychological Symptoms of Dementia (BPSD)



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A VA Clinician's Guide



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Take-home Points

Identify possible triggers for BPSD, stop the offending medication, lower the dose, find a safer alternative and/or treat the underlying condition.

Develop behavioral and environmental interventions for management of non-emergent BPSD.

Avoid use of benzodiazepines and antipsychotics in elderly patients with BPSD*.

Document a risk-benefit discussion, including risk of increased mortality from certain agents, with the Veteran and/or caregiver before initiating drug treatment and upon follow-up.

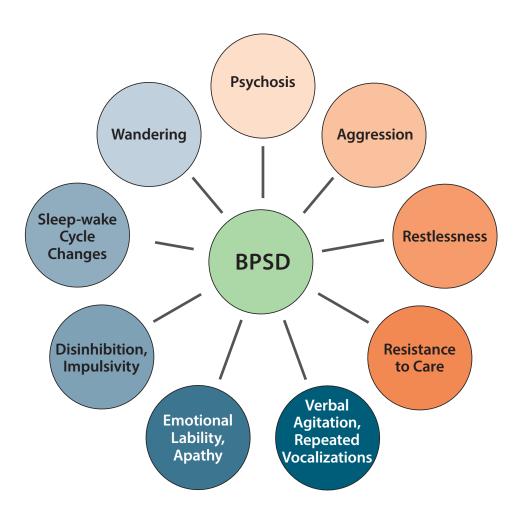
^{*}Most elderly patients with BPSD can be managed without use of antipsychotics. All reasonable efforts should be made to avoid use of antipsychotics for behavioral problems of dementia and/or delirium unless nonpharmacological options (e.g., behavioral interventions) have failed or are not possible and the older adult is threatening substantial harm to self or others.

Background

Behavioral and psychological symptoms of dementia (BPSD) contribute to patient and caregiver distress, can compromise safety or lead to institutionalization, and add to health care costs.^{1,2,3}

BPSD are almost universally experienced at some point among patients with dementia and can range from behaviors that are mild and do not cause harm to those that endanger the patient and/or others. The symptoms with the greatest potential for harm are aggression and psychosis.^{4–6}

Figure 1. Common Behavioral and Psychological Symptoms of Dementia (BPSD)^{1,4,5,7}



Emergent vs. Non-emergent Behavioral And Psychological Symptoms Of Dementia

Assess the type, frequency, severity, pattern and timing of BPSD symptoms before determining treatment strategy.8-10

Table 2. Medications Approved for Dementia⁷⁻¹⁶

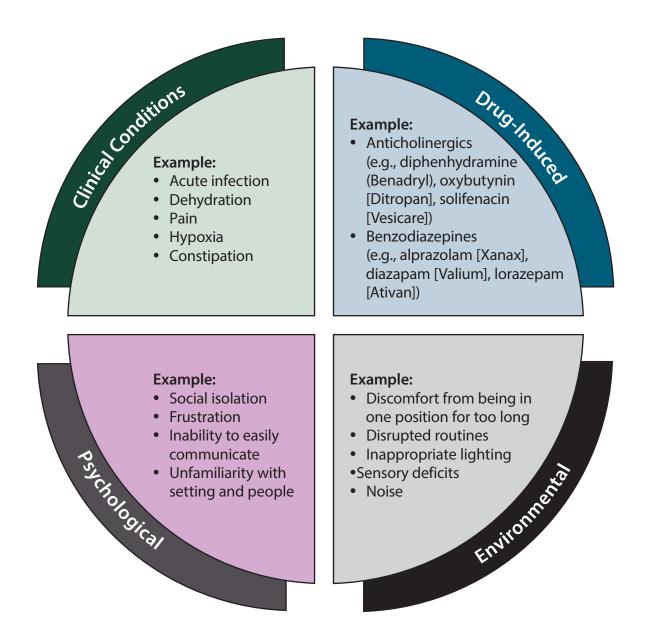
	BPSD	
	Emergent BPSD	Non-Emergent BPSD
Frequency	Rare	Common
How to Differentiate	 Severe distress May pose an imminent danger to themselves or others, or have severely disruptive or dangerous behaviors 	Symptoms may be inconvenient or bothersome, may disrupt their functioning, or otherwise erode quality of life
Management	Drug therapy may be required for: • Physical aggression/violence • Psychosis • Self-harm	Drug therapy <u>rarely</u> required

Symptoms of BPSD may be the result of modifiable factors that may include:10,11

- Unmet needs
 - Pain, hunger, boredom, insufficient activity, communication challenges
- Acute infection
 - Urinary tract infection
- Dehydration
- Delirium
- Undiagnosed mental health disorders
- Current medications
- Psychological and environmental factors



Figure 2. Modifiable Contributors to Rule Out



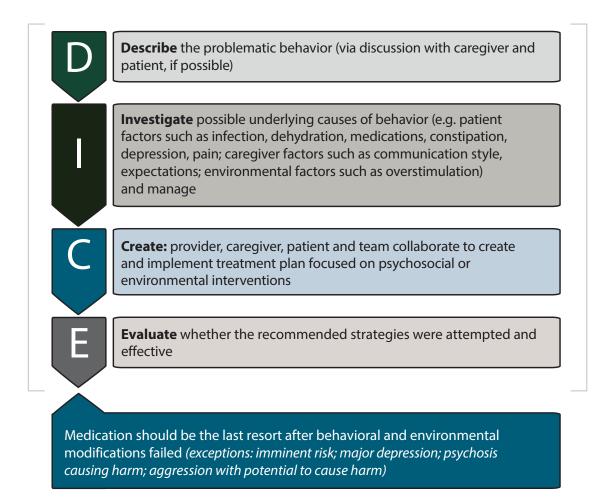
Adverse drug effects are one of the most common reversible conditions in geriatric medicine. Many medications routinely used by older adults can cause or worsen behavioral and psychological problems.¹²

"Any new symptom in an older patient should be considered a possible drug side effect until proven otherwise."

Identify possible triggers for behavioral and psychological symptoms of dementia, stop the offending medication, lower the dose, find a safer alternative and/or treat the underlying condition.

When a patient presents with BPSD, consider using the **DICE** approach:

Figure 3. DICE Approach for Behavioral and Psychological Symptoms of Dementia^{8,13}



Behavioral and Environmental Interventions

Behavioral or environmental strategies are often the most appropriate management approaches to address the underlying cause of the behavior and effectively address many symptoms with far fewer risks than drugs.^{10,14}

It is important to perform a comprehensive assessment of the symptom(s), considering the "ABCs" (see next page). This approach is used in the STAR-VA model in community living center settings (CLC) and has been shown to be effective with a reduction in both target behavior frequency (45.4% average decline) and severity (63.8% average reduction).¹⁴

ABCs

- Activator—What are the triggers for the behavior(s)? What happened right before?
- **Behavior**—Which behavior(s) are appropriate targets for intervention?
- **Consequences**—What are the consequences of the behavior(s) for the patient and others? What was the response to the behavior? How did the response affect the behavior?

Table 1. Management Approaches^{11,15}

Management Strategy	Description
Identify and Address Unmet Needs	Assume that behavioral and psychological symptoms of dementia may sometimes be a result of an unmet need which is not expressed, such as pain, hunger, having to go to the bathroom, being too hot or cold, or loneliness.
Caregiver Education & Support	Caring for a patient with dementia, while potentially rewarding, can also be overwhelming at times; ask how the caregiver is doing, and refer them to a VA Caregiver Support Program. Provide education about dementia to help the caregiver realize behaviors do not reflect the patient intentionally "being difficult." VA Caregiver Support Line 1-855-260-3274, VA Care Giver Support Website www.caregiver.va.gov.
Environmental Vulnerability and Reduced Stress-Threshold Interventions	Some behaviors may reflect a mismatch between the person's environment and his or her abilities to cope with the situation (e.g., person becomes agitated by too much noise).

The management approaches with the strongest evidence base are those based on caregiver interventions¹⁵. These approaches typically provide:

- Education and support for the caregiver
- Training in stress reduction and/or cognitive reframing techniques
- Specific problem solving skills to manage behavioral symptoms (e.g. increasing the activity of the person with dementia; enhancing communication with the person with dementia; reducing the complexity of the physical environment; and simplifying tasks for the person with dementia)

Develop behavioral and environmental interventions for management of non-emergent behavioral and psychological symptoms of dementia.

Pharmacologic Management of Behavioral and Psychological Symptoms of Dementia

There are no FDA-approved medications for BPSD. Medication use for BPSD has evolved anecdotally over the years based on clinicians using many classes of medications off—label. Be sure to engage in shared-decision making and inform the patients of the risks vs benefits when discussing options with the patient and/or caregiver. If pharmacotherapy is considered necessary, behavioral and environmental interventions should be instituted concurrently.

Table 2. Pharmacologic Management^{3,16–28}

Medications	Recommendations
Antidepressants (e.g. Citalopram, Sertraline or Trazodone)	\bullet One or two trials of antidepressants may be considered as the 2^{nd} line approach if behavioral and environmental strategies are ineffective
Cholinesterase Inhibitors and Memantine	 Cholinesterase inhibitors may be an option for patients with mild to moderate AD and BPSD however not all data suggests these medications are effective for BPSD; memantine is only approved for moderate to severe dementia
	 If a patient is going to receive a trial of either medication (cholinesterase inhibitor or memantine) for cognitive impairment, wait to see if this will also be helpful for the BPSD
Antipsychotics (e.g. Aripiprazole and Risperidone)	 Avoid in non-emergent BPSD until other medications have been tried May help control emergent* symptoms of BPSD in certain patients but should be used at low doses in a time-limited trial (e.g. 4 months) if possible

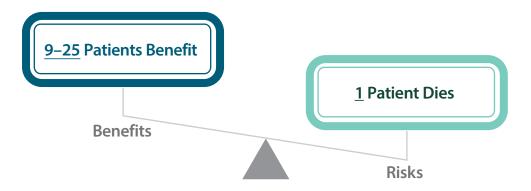
^{*}Physically aggressive or violent behavior that poses a danger to the patient or others, hallucinations or delusions that are distressing to the patient, lead to dangerous behavior, or significantly impair normal functioning

Serious Risks Associated with Pharmacotherapy Agents

Antipsychotics

When antipsychotics are used in elderly patients with dementia, risk of death increases up to 4-fold.²⁹ It is important to weigh the risks versus benefits of antipsychotic use in each patient.

Figure 4. Benefit vs Risk of Death with Antipsychotic Use in Patients with Dementia^{28,30}



For Every 100 Patients with Dementia Treated with an Antipsychotic

Number needed to harm (NNH) calculated by using the inverse of the absolute risk difference for death in patients treated over 10-12 weeks (NNH = 100, with a 95% CI from 53 to 1000). Many trials demonstrated that antipsychotics are only modestly effective (numbers needing to treat (NNT) ranging from 4 to 12) in specific meta-analyses.

Antipsychotics have also been associated with other serious risks including:

- 2-fold increased risk of stroke^{31,32}
- Increased risk of becoming hospitalized or dying within 30 days of initiation^{33,34}
- Falls

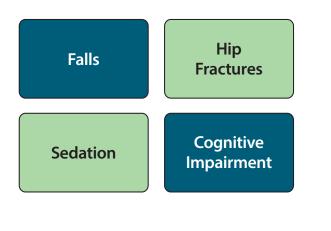
All antipsychotics have a box warning for use in patients with dementia due to increased risk of death compared to placebo. As of 2016, there is also a box warning for increased risk of respiratory suppression and death from co-prescribing of opioids and CNS-depressants, including antipsychotics.

Benzodiazepines^{35,36}

In patients with dementia, benzodiazepines may cause or exacerbate:

- Cognitive impairment
- Higher risk of falls
- Paradoxical agitation
- Aspiration
- Death

Figure 5. Benzodiazepines are Associated with Significant Risks in the Elderly³⁷⁻⁴¹



Avoid use of antipsychotics and benzodiazepines in elderly patients with behavioral and psychological symptoms of dementia*.

*Most elderly patients with BPSD can be managed without use of antipsychotics. All reasonable efforts should be made to avoid use of antipsychotics for behavioral problems of dementia and/or delirium unless nonpharmacological options (e.g., behavioral interventions) have failed or are not possible and the older adult is threatening substantial harm to self or others.

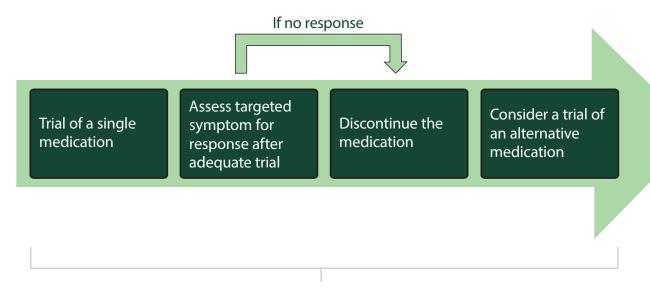
Other Pharmacotherapy Considerations

Combination use of pharmacotherapy is not recommended.



 Any therapeutic trial of a medication for BPSD should be completed with a single medication

Figure 6. Medication Management Strategy

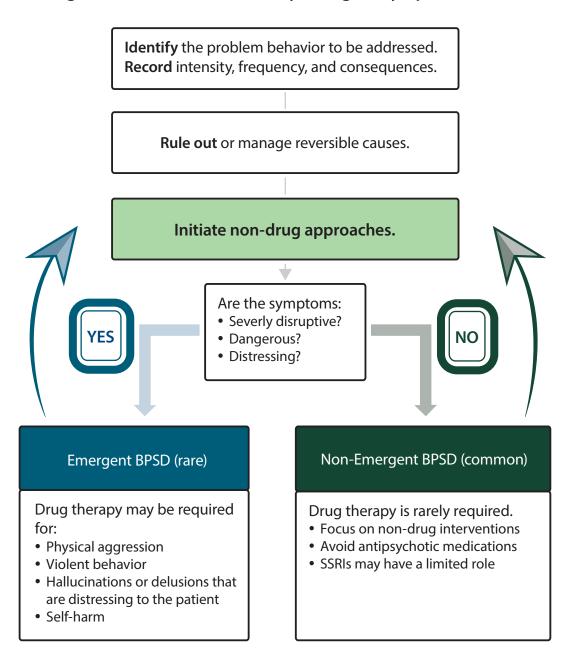


Monitor patients closely for both adverse effects and drug-drug interactions

If BPSD are not severely disruptive, dangerous, or distressing to the patient or caregiver (non-emergent BPSD), medications are usually not warranted. Medications may be indicated for other non—BPSD symptoms, e.g., depression, anxiety, or psychosis. If a medication must be used, it is critical to focus on one or more specific target symptoms. This kind of focus can provide a clear basis for ongoing monitoring and symptoms re-evaluation.



Figure 7. Management of Behavioral and Psychological Symptoms of Dementia^{8,9}



Document a risk-benefit discussion, including risk of increased mortality from certain agents, with the Veteran and/or caregiver before initiating drug treatment of behavioral and psychological symptoms of dementia and upon follow-up.

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These are general recommendations only; specific clinical decisions should be made by the treating provider based on an individual patient's clinical condition.

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