





Behavioral & Psychological Symptoms of Dementia: A Practical Approach

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Objectives

- BPSD Introduction, Burden, & Types.
- BPSD Approach & Bedside Manners.
- BPSD Pharmacological & Non Pharmacological Treatments.
- 10 Practical Tips.





No Conflicts of Interest To Declare



BPSD Introduction, Burden, & Types



BPSD Definition

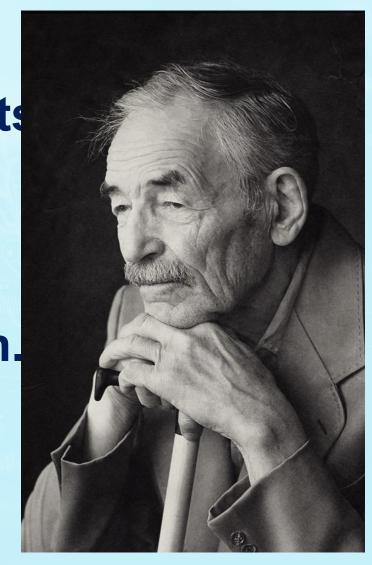
- Behavioral and psychological symptoms of dementia.
- The spectrum of non-cognitive and non-neurological symptoms of dementias.
- 80% dementia patients experience BPSD.
- Extremely heterogenous between patients for type, severity, and frequency.
- Neuroinflammation, cognitive





BPSD Burden

- Reduce quality of life for patients
- Increased suffering and pain.
- Caregiver burnouts.
- Increased risk for placement.
- Increased risk of hospitalization.
- Ruins relationships.
- Safety and security concerns.





BPSD Burden

- Harm to self and others.
- Wandering.
- Leaving the stove on.
- Financial Security.
- Driving.
- Medication adherence/overuse.





- Agitation.
- Aggression.
- Paranoia.
- Delusion.
- Hallucination.
- Wandering.
- Anxiety.
- Depression.
- Care refusal.
- Insomnia.
- Preservation.
- Apathy.





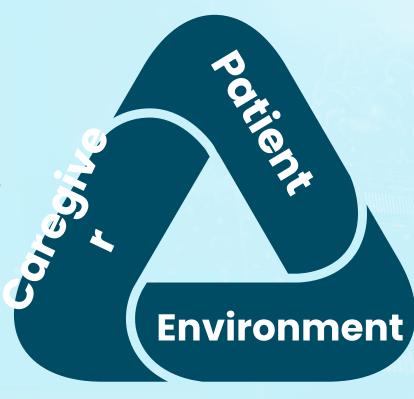


BPSD Approach & Bedside Manners



3 Factors

- Stress and burden
- Lack of awareness
- Communication
- Expectations



- Unmet needs
- Medical issue
- Sensory deficit
- Life story
- Hobbies

- Overstimulating
- Understimulating
- Unsafe
- Lack of activity
- Lack of routines



DICE

- Describe (ABC)
- Investigate (PIECES)
- Create (Provider, Caregiver, & Patient)
- Evaluate (Monitor)





PIECE S





PIECE

- <u>Physical</u>: delirium, disease, drugs, disability
- <u>Intellectual</u>: amnesia, apathy, aphasia, agnosia
- <u>Emotional</u>: delusion, personality, adjustment, mood
- Capabilities: ADLS and IADLS
- <u>Environmental</u>: Stimulation, noise, lighting, relocate
- Social: network, life story, culture





PIECES Example

Case:

75 year old male wheelchair bound (broken) with DM, strokes (vascular dementia), falls, and depression

Yells at all male nurses and gets anxious Suspects he is being poisoned so does not eat

Aphasic and does not speak
Tearful all day
Started amitriptyline 2 weeks ago for







- Case:
- Physical: No delirium, wheelchair bound (old)
- <u>Intellectual</u>: expressive aphasia, excellent education
- <u>Emotional</u>: depressive and paranoid features
- <u>Capabilities</u>: can do some ADLs but no IADLs
- Environmental: Too noisy and boring
- Social: Only has one friend and used to







Spring Strain answer questions non-verbally despite aphasia

- Do not mention past trauma and only have male nurses visit him
- Offer canned food (no poisoning)
- Switch TCA to SSRI and consider antipsychotic if persistent paranoia
- Reduce sound in environment and provide Quran recordings and activities
- Ask the one friend to visit or recordings and provide safe farming tools





BPSD Bedside Manners

- Talk slowly with low frequency voice
- Use one-step instructions
- Avoid arguing (accept different perceptions)
- Use of yes/no and choice questions versus open ended
- Use the persons name
- Repeat and rephrase sentences





BPSD Bedside Manners

- View behavior as attempts to communicate unmet needs
- Recognize micro-behavioral changes (eye movement, lifting the corner of the mouth, tears, etc)
- Reflect your own nonverbal behavior
 - Make eye contact
 - Give enough time
 - Listen actively





BPSD Bedside

Magger Sesture and point

- 5 second delay between prompt and reply
- If getting nowhere (leave and return)
- Mention what you will do BEFORE you do it
- X3 bubble space
- Avoid potential tools/equipment at reach
- Exit and safety strategy





BPSD Steps

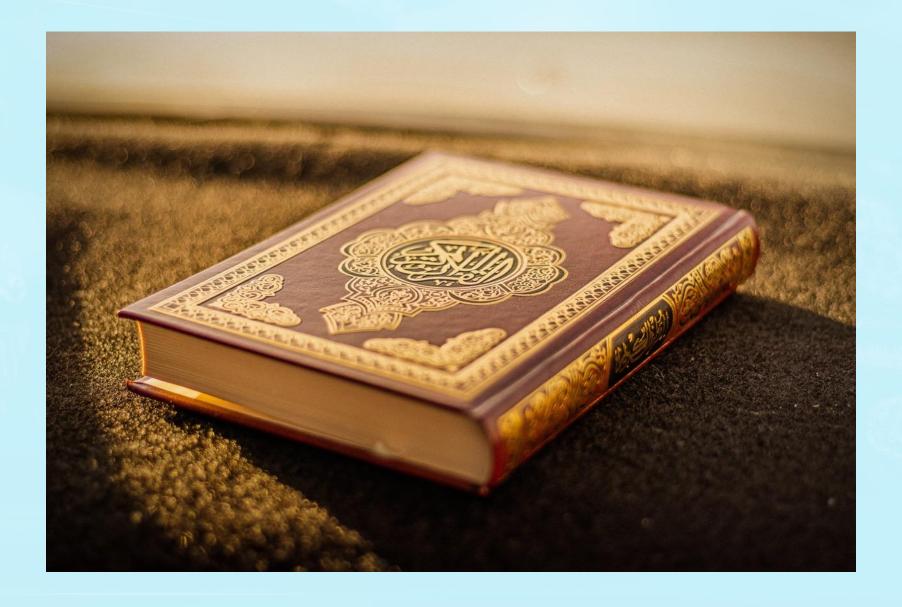
- Step 1: Rule out delirium first
- Step 2: Treat basic needs
- Step 3: Identify type of BPSD
- Step 4: Apply DICE & PIECES
- Step 5: Send to ER if safety concerns





BPSD Pharmacological & Non-Pharmacological Treatments

























BPSD Medications

- Even if you will initiate medications, must treat all non-pharmacologically too
- Some evidence that SSRI and Ach-E-I work but limited
- Some evidence antipsychotics work
- Response varies significantly from patient to patient and type of BPSD
- Unfortunately, many healthcare providers are quick to use



antinsychotics as first line



Antipsychotics

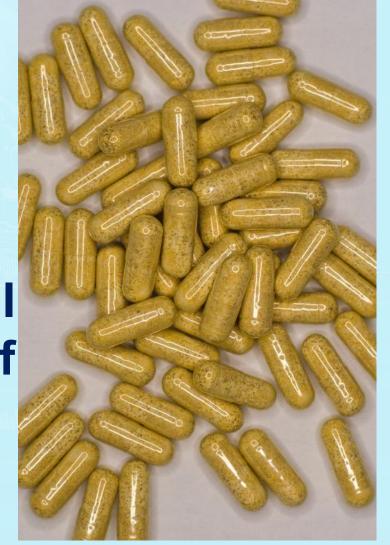
- First identify if BPSD will likely respond per evidence depending on type
- •3 months (to see if you can taper off once responsive) by 25% every 2 weeks
- Some many need it for life
- Choose specific antipsychotic depending on side effect profile





Antipsychotic Indicationsis

- Harm to self or others
- Resisting or removing life saving equipment
- Severe BPSD non-responsive to all other methods impacting quality of life



10 Practical Tips &

Summatoy correcting them

- 2. Treat basic needs first
- 3. Rule out delirium
- 4. BPSD always non-pharmacological regardless
- 5. Antipsychotics are not magical pills
- 6. DICE and PIECES approach
- 7. Bedside manners
- 8. Manage family expectations
- 9. Use their life story and be creative
- 10. Goals of care







Resources

















Thank you

Refrences



- Robert L Kane et al. Essentials of Clinical Geriatrics 8th edition (2018)
- Jeffrey B. Halter et al. Hazzard's Geriatric Medicine and Gerontology 7th edition (2016)
- Jayna Holroyd-Leduc et al. Evidence Based Geriatric Medicine (2012)
- Petersen RC, Stevens JC, Ganguli M, et al. Practice parameter: early detection of dementia: mild cognitive impairment (an evidence-based review). Report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2001; 56:1133.
- Caselli RJ. Current issues in the diagnosis and management of dementia. Semin Neurol 2003; 23:231.
- Clarfield AM. The reversible dementias: do they reverse? Ann Intern Med 1988; 109:476.
- Wang PN, Wang SJ, Fuh JL, et al. Subjective memory complaint in relation to cognitive performance and depression: a longitudinal study of a rural Chinese population. J Am Geriatr Soc 2000; 48:295
- Karlawish JH, Clark CM. Diagnostic evaluation of elderly patients with mild memory problems. Ann Intern Med 2003; 138:411.
- U.S. Preventive Services Task Force. Screening for dementia: recommendation and rationale. Ann Intern Med 2003; 138:925.
- Boustani M, Peterson B, Hanson L, et al. Screening for dementia in primary care: a summary of the evidence for the U.S. Preventive Services Task Force. Ann Intern Med 2003; 138:927.
- Campbell NL, Boustani MA, Lane KA, et al. Use of anticholinergics and the risk of cognitive impairment in an African American population. Neurology 2010; 75:152.
- Carrière I, Fourrier-Reglat A, Dartigues JF, et al. Drugs with anticholinergic properties, cognitive decline, and dementia in an elderly general population: the 3-city study. Arch Intern Med 2009; 169:1317.
- Tsoi KK, Chan JY, Hirai HW, et al. Cognitive Tests to Detect Dementia: A Systematic Review and Meta-analysis. JAMA Intern Med 2015; 175:1450.
- Knopman DS, Petersen RC, Cha RH, et al. Incidence and causes of nondegenerative nonvascular dementia: a population-based study. Arch Neurol 2006; 63:218.
- Geschwind MD, Shu H, Haman A, et al. Rapidly progressive dementia. Ann Neurol 2008; 64:97.
- Gifford DR, Holloway RG, Vickrey BG. Systematic review of clinical prediction rules for neuroimaging in the evaluation of dementia. Arch Intern Med 2000; 160:2855.
- Frisoni GB, Fox NC, Jack CR Jr, et al. The clinical use of structural MRI in Alzheimer disease. Nat Rev Neurol 2010; 6:67.
- Neary D. Non Alzheimer's disease forms of cerebral atrophy. J Neurol Neurosurg Psychiatry 1990; 53:929.
- Relkin N, Marmarou A, Klinge P, et al. Diagnosing idiopathic normal-pressure hydrocephalus. Neurosurgery 2005; 57:S4.
- Román GC, Tatemichi TK, Erkinjuntti T, et al. Vascular dementia: diagnostic criteria for research studies. Report of the NINDS-AIREN International Workshop. Neurology 1993; 43:250
- Kornhuber J, Weller M, Schoppmeyer K, Riederer P. Amantadine and memantine are NMDA receptor antagonists with neuroprotective properties. J Neural Transm Suppl 1994; 43:91.

Refrences



- Reisberg B, Doody R, Stöffler A, et al. Memantine in moderate-to-severe Alzheimer's disease. N Engl J Med 2003; 348:1333.
- Reisberg B, Doody R, Stöffler A, et al. A 24-week open-label extension study of memantine in moderate to severe Alzheimer disease. Arch Neurol 2006; 63:49.
- Howard R, McShane R, Lindesay J, et al. Donepezil and memantine for moderate-to-severe Alzheimer's disease. N Engl J Med 2012; 366:893.
- Howard R, McShane R, Lindesay J, et al. Nursing home placement in the Donepezil and Memantine in Moderate to Severe Alzheimer's Disease (DOMINO-AD) trial: secondary and post-hoc analyses. Lancet Neurol 2015; 14:1171.
- McShane R, Areosa Sastre A, Minakaran N. Memantine for dementia. Cochrane Database Syst Rev 2006; :CD003154.
- Schneider LS, Dagerman KS, Higgins JP, McShane R. Lack of evidence for the efficacy of memantine in mild Alzheimer disease. Arch Neurol 2011; 68:991.
- Raina P, Santaguida P, Ismaila A, et al. Effectiveness of cholinesterase inhibitors and memantine for treating dementia: evidence review for a clinical practice guideline. Ann Intern Med 2008; 148:379.
- Qaseem A, Snow V, Cross JT Jr, et al. Current pharmacologic treatment of dementia: a clinical practice guideline from the American College of Physicians and the American Academy of Family Physicians. Ann Intern Med 2008; 148:370.
- Tariot PN, Farlow MR, Grossberg GT, et al. Memantine treatment in patients with moderate to severe Alzheimer disease already receiving donepezil: a randomized controlled trial.
 JAMA 2004; 291:317.
- Porsteinsson AP, Grossberg GT, Mintzer J, et al. Memantine treatment in patients with mild to moderate Alzheimer's disease already receiving a cholinesterase inhibitor: a randomized, double-blind, placebo-controlled trial. Curr Alzheimer Res 2008; 5:83.
- Farina N, Llewellyn D, Isaac MG, Tabet N. Vitamin E for Alzheimer's dementia and mild cognitive impairment. Cochrane Database Syst Rev 2017; 1:CD002854
- Dysken MW, Sano M, Asthana S, et al. Effect of vitamin E and memantine on functional decline in Alzheimer disease: the TEAM-AD VA cooperative randomized trial. JAMA 2014; 311:33.
- Snyder HM, Corriveau RA, Craft S, et al. Vascular contributions to cognitive impairment and dementia including Alzheimer's disease. Alzheimers Dement 2015; 11:710.
- Deschaintre Y, Richard F, Leys D, Pasquier F. Treatment of vascular risk factors is associated with slower decline in Alzheimer disease. Neurology 2009; 73:674.