

Knowledge Café: Behavioural Assessment

RGPs of Ontario Conference

May 31, 2007

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Recommended References

- Cummings JL, et al. Guidelines for managing Alzheimer's disease: Part I. Assessment. Am Fam Physician 2002;65:2263-72, www.aafp.org/afp.
- Rayner AV, O'Brien JG. Behavior disorders of dementia: recognition and treatment. Am Fam Physician 2006;73:647-54, www.aafp.org/afp.
- Teri L, et al. Nonpharmacologic treatment of behavioral disturbance in dementia. Med Clin N Am 2002;86:641-56.
- Sink KM, et al. Pharmacological treatment of neuropsychiatric symptoms of dementia: a review of the evidence. JAMA 2005;293:596-608.

Learning Objectives

- Knowledge café: peer to peer learning with other health care professionals
- Recognize the wide spectrum and impact of behavioural and psychological symptoms of dementia
- Develop an evidence-based approach to assessing these behaviours, to help guide (non-pharmacological and/or pharmacological) management

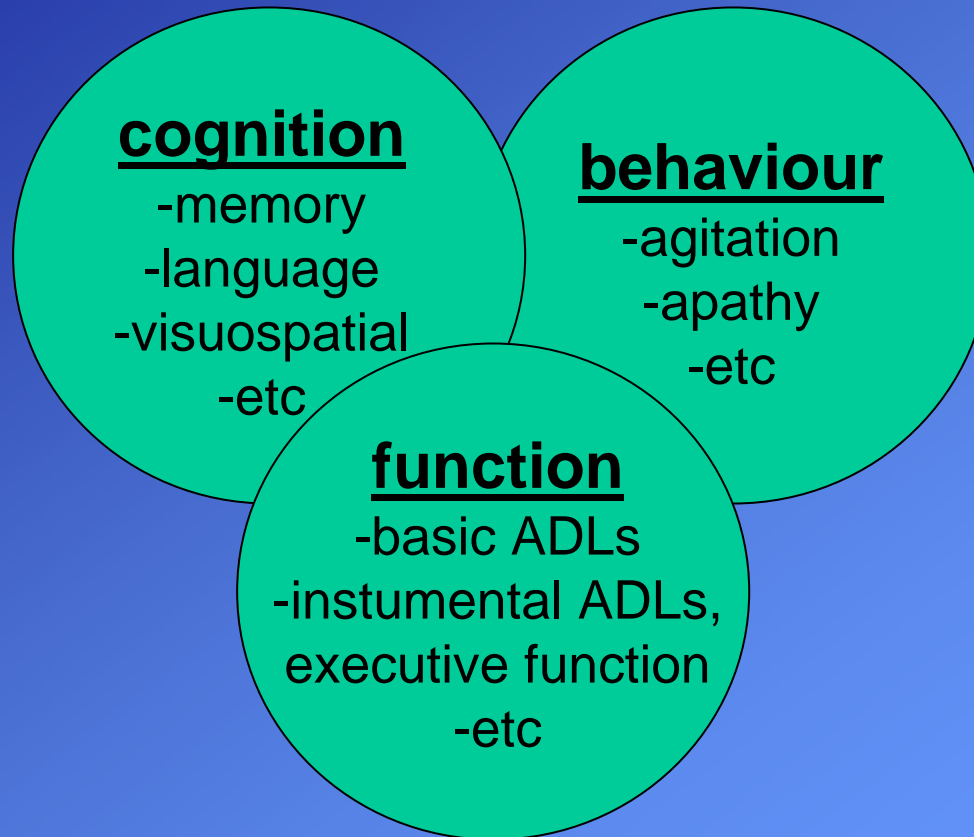
Handout Outline

- Definitions
- Prevalence and Impact of BPSD
- Approach to Behavioural Assessment in Older Adults (esp those with dementia)
 - Ruling Out Delirium and Medical Illness
 - Measuring BPSD Symptoms
 - Brief Discussion of Non-pharmacological and Pharmacological Treatments

Definitions

- Dementia:
 - acquired, persistent (usually progressive) cognitive impairment, sufficient to interfere with social/occupational functioning
 - many definitions (NINCDS-ADRDA, DSM-IV) focus on **cognitive** impairment and decline; however, **behavioural and psychological** problems of dementia are common, persistent, and add considerably to caregiver burden

Definitions



Dementia

Definitions

- Behavioural and psychological symptoms of dementia (BPSD):
 - “Symptoms of disturbed perception, thought content, mood or behaviour that frequently occur in patients with dementia”

International Psychogeriatric Association consensus group, 1996
 - Umbrella term, doesn't indicate a specific diagnosis
- Agitation:
 - “inappropriate verbal, vocal or motor activity unexplained by apparent needs or confusion”

Cohen-Mansfield and Billig, 1986

BPSD Symptom 'Clusters'

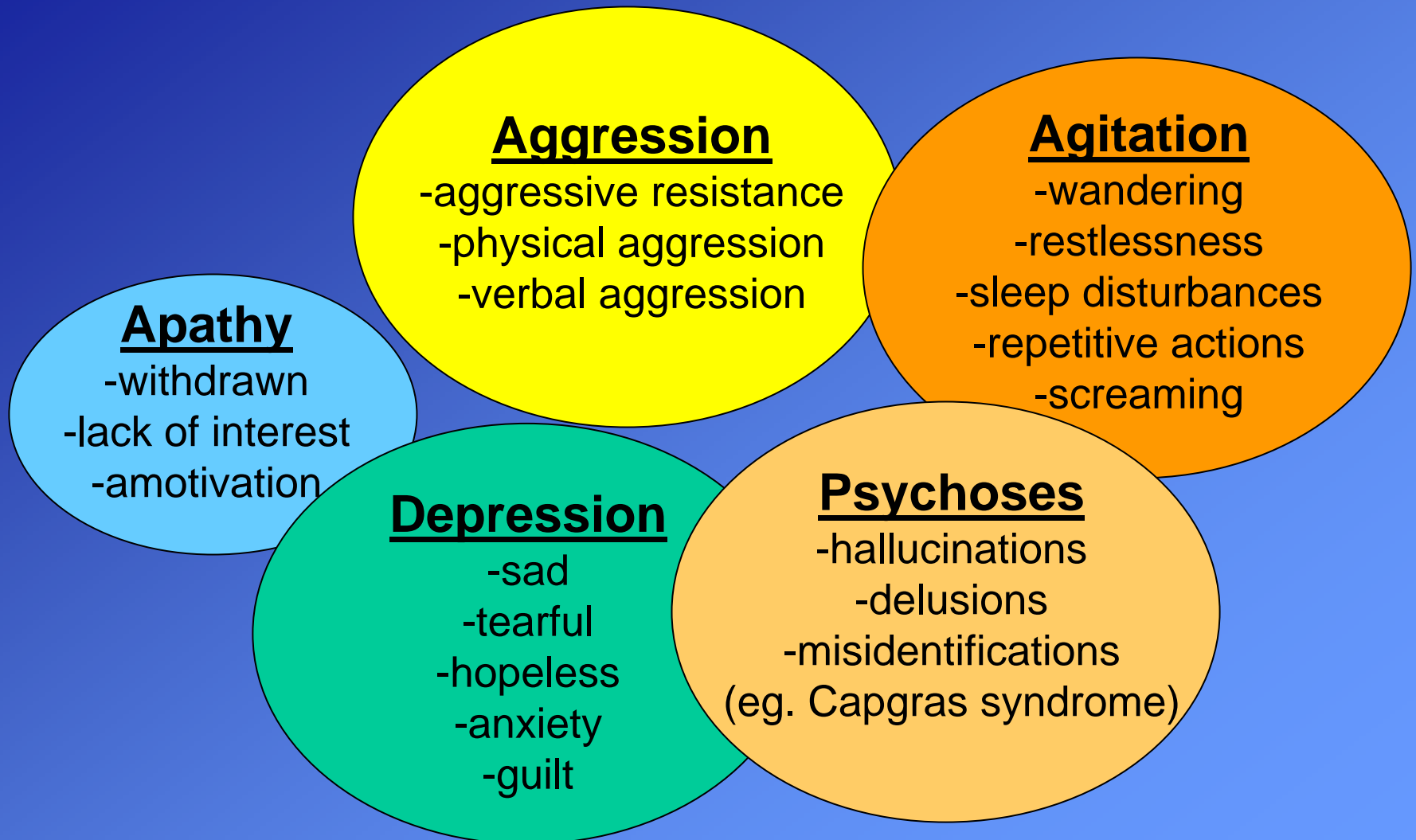
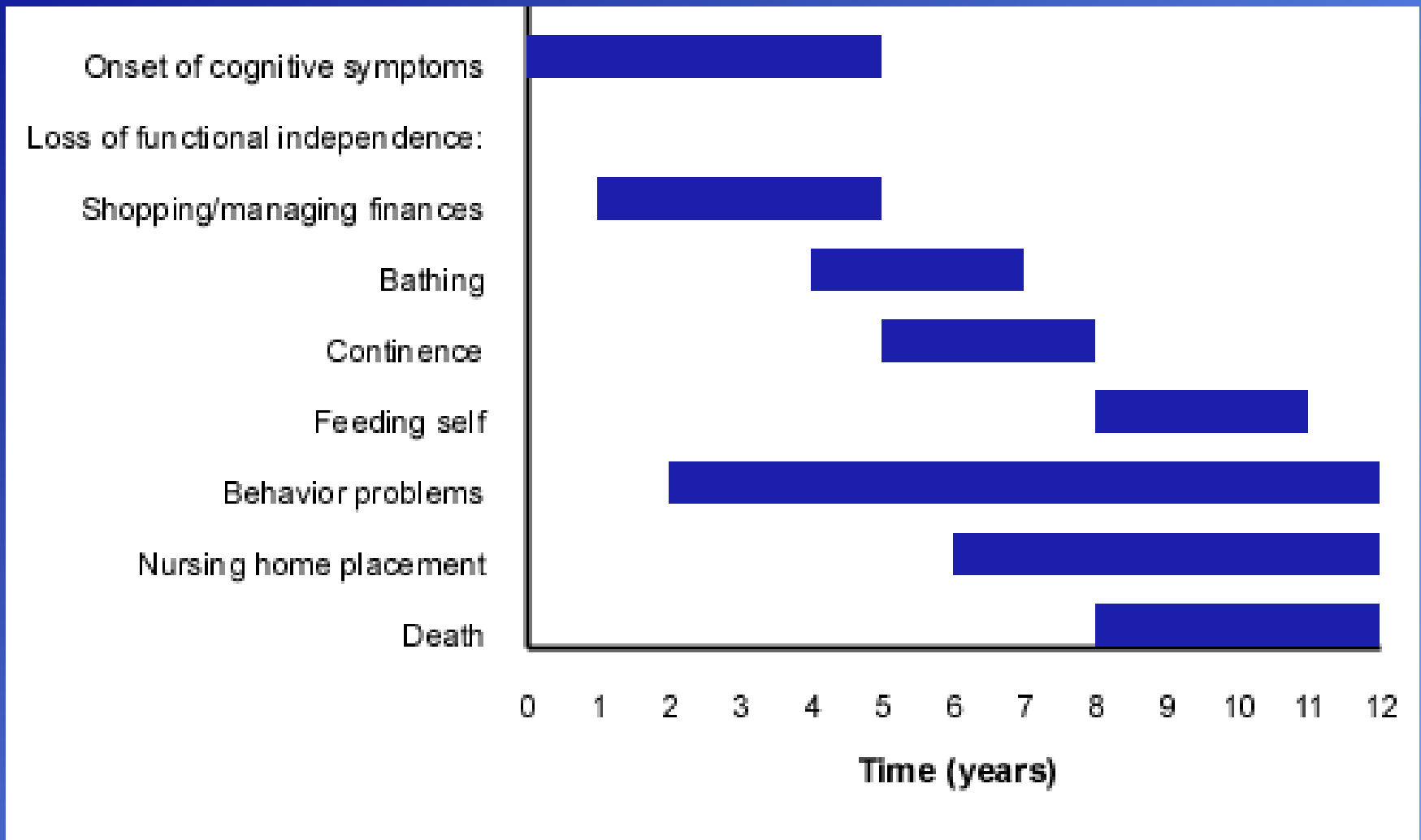


Table 5. Common Behavioral Disturbances in Dementia

<i>Aggression</i>	<i>Affect mood</i>
Verbal	Anxiety
Screaming	Depressive symptoms
Cursing	Apathy
Physical	Irritability
Hitting	Anger outbursts
Biting	<i>Thought and perception</i>
Kicking	Delusions
Scratching	Hallucinations
Grubbing	Illusions
<i>Nonaggressive behavioral</i>	Misperceptions
Verbal	<i>Vegetative symptoms</i>
Repetitive questioning	Sleep disturbances
Complaining	Insomnia
Physical	Increased daytime napping
Wandering	Sundowning
Pacing	Sexual
Hoarding	Hyposexuality
Rummaging	Hypersexuality
Hiding	Sexual disinhibition
Taking other people's belongings	Appetite
Voiding in inappropriate places	Poor food intake
Shadowing	Hyperphagia
Resistance to care	
Intrusiveness	
Fatigability	
Mannerisms	



BPSD: Prevalence, Impact

- BPSD common (50-90% patients), persistent
- Associated with:
 - ↓ functional ability, poorer prognosis
 - ↓ QOL for patients, caregivers
 - ↑ burden on caregivers, nursing home staff
 - ↑ health care utilization and costs
 - ↑ risk of nursing home placement
- In the past decade, explosion of research into treatment options for BPSD

Challenges in Translating Research into Practice

- Research into treatments for BPSD:
 - Heterogeneity of BPSD symptoms, severity
 - Improvements over “placebo”:
nonpharmacologic treatment gains
 - Few head-to-head comparisons
 - Concerns about risk:benefit ratios for many pharmacologic treatments, especially in light of recently noted adverse events

Behavioural Assessment Tools: Tension Between Research & Clinical Goals

Research Goals

- Ideal assessment scale demonstrates validity (concurrent, predictive, etc), reliability (inter- and intra-rater), and sensitivity to change
- To achieve these attributes, tool may require ↑ time to administer, complexity to interpret

Clinical Goals

- Ideal tool is brief, easy to administer and score
- Should assist clinician:
 - a) Describe nature of behaviour (mood, psychosis, etc)
 - b) Rate severity of behaviour (anchor for subsequent change with treatment)
 - c) Identify possible reason(s) for behaviour

Approach to Behavioural Assessment in Older Adults

- First, does the patient have an established diagnosis of dementia?
- (It may be difficult to diagnose dementia in the context of behavioural disturbance)
- Importance of caregiver and other informant history re: prior cognitive, functional, and behavioural problems

Approach to Agitation in Dementia

- Next, is it BPSD? **Rule out Delirium**
- How can you distinguish Delirium vs. BPSD?
- Delirium associated with:
 - Acute onset (minutes-hours)
 - Fluctuations in symptoms
 - Altered level of consciousness
 - Prominent inattention
 - *Underlying problem(s): underlying acute medical illness (infection, volume depletion or overload, cardiac ischemia, etc) and/or adverse drug effects

Approach to Agitation in Dementia

- Next, characterize nature & severity of BPSD
- In non-acute setting, consider using an assessment scale for initial assessment & follow-up of BPSD
- Several reliable, valid scales that cover the spectrum of BPSD exist, eg.:
 - Neuropsychiatric Inventory Questionnaire (NPI-Q)
Cummings. Am Fam Phys 2002;2263-72.
 - Cohen-Mansfield Agitation Inventory (CMAI)
 - Many others (see Sink et al, JAMA 2005)

Approach to Agitation in Dementia

- Important to systematically document behaviours:
- Structured approach to observation allows recognition, anticipation and avoidance of potentially provocative events

Nilsson K. Acta Psychiatr Scand 1988;78:172-5.

- Also consider role of sensory deficits: hallucinations can result from visual or hearing impairment

Chapman FM. Am J Psychiatry 1999;156:1983-5.

Approach to Agitation in Dementia

- **ABC** charting:
 - Identify the **Antecedant** = triggering event
 - Describe the **Behaviour** = what, where, when, whom
 - Identify the **Consequences** = results of behaviour
- Then try to modify antecedants, anticipate and prevent untoward consequences

Approach to Agitation in Dementia

- Education, training & support for caregivers
 - eg. Alzheimer Society, “36 Hour Day”, short-term respite admissions for community-dwelling patients
- Nonpharmacologic approaches:
 - eg. identify and introduce pleasant events (eg. outings, videotapes of loved ones)
 - bright light, music therapy
 - redirection for agitated behaviours
 - wandering registry, ID bracelet, alarm for wandering

Management of Behavior Problems in Patients with Alzheimer's Disease

Use the five "P's" for effective assessment and planning

- Describe the **problem** accurately--what happens, who is involved, when it occurs, what precedes the behavior and what consequences result for the patient and caregivers.
- Assess the **patient** – are there unmet needs that may be triggering the behavior? Is an undetected medical problem present (e.g., pain)? What stresses are acting on the patient? Are delusions or other psychotic signs present? Is the patient depressed?
- Brainstorm **possible causes** – an interdisciplinary team meeting is the best setting in which to do this.
- Develop a **plan**.
- Implement the plan, reassess it, modify it if necessary and **pass** it on to all caregivers if it is successful.

First-line treatment: behavioral and environmental therapy

- The key to success is changing what the patient experiences.
- Caregiver action (such as a calm demeanor, validation of feelings and beliefs, and use of techniques such as redirection and distraction) is important.
- Environmental modification can often remove or lessen the provoking stimuli.

Indications for medication, with recommended initial drugs

- Medicate early if delusions, depression or pain is present; otherwise, medicate only if agitation cannot be controlled by behavioral methods.
- Just as important as considering the addition of medication, is to consider withdrawing potentially offending medications (eg. benzodiazepines, anticholinergic drugs, inappropriately dosed opioids, etc)
- If medication used, remember that older persons generally need lower doses and that persons with dementia

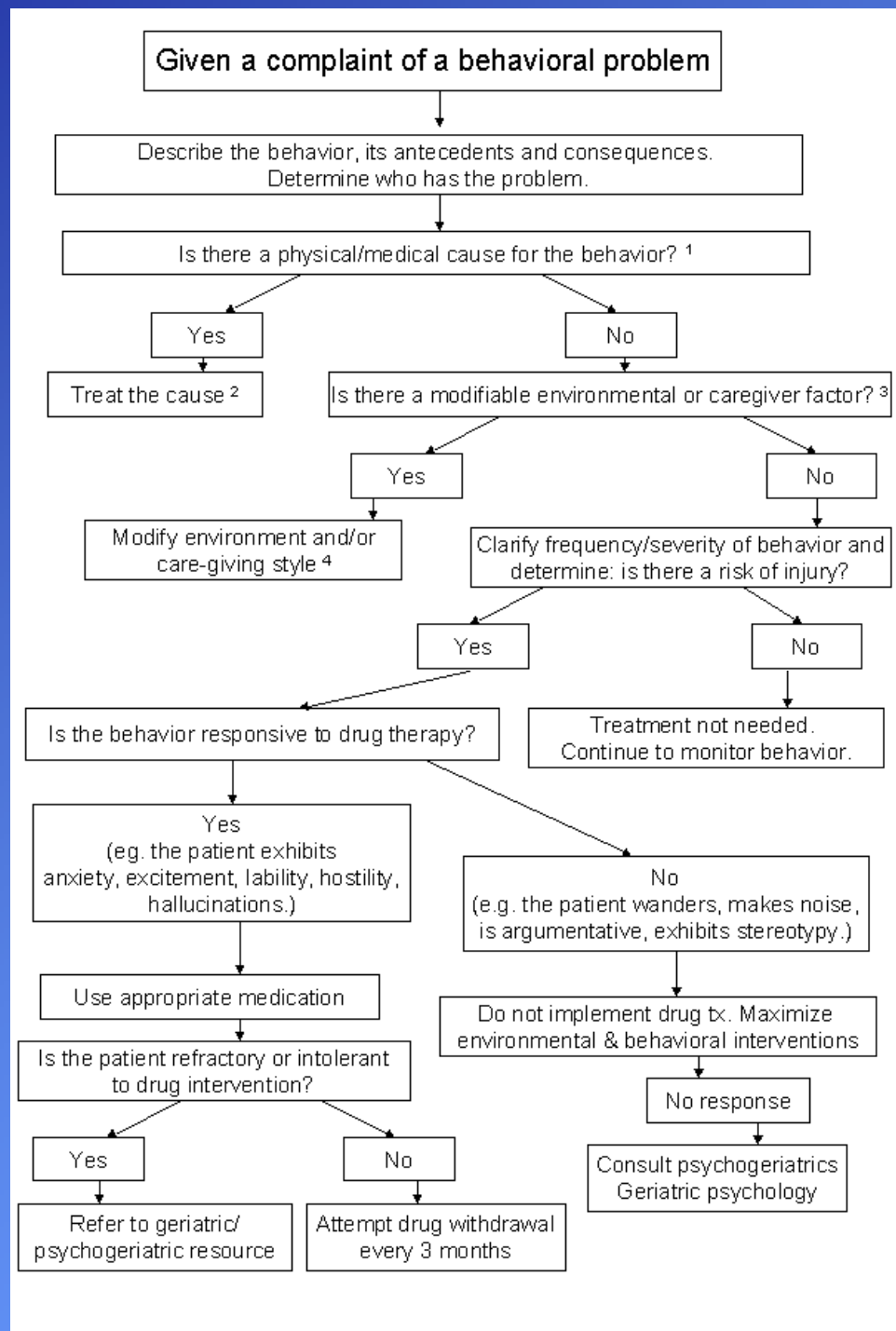
A Stepwise Approach to Managing Behaviors in Dementia

1 = Consider delirium (eg. due to infection, adverse drug reactions, pain, other medical causes)

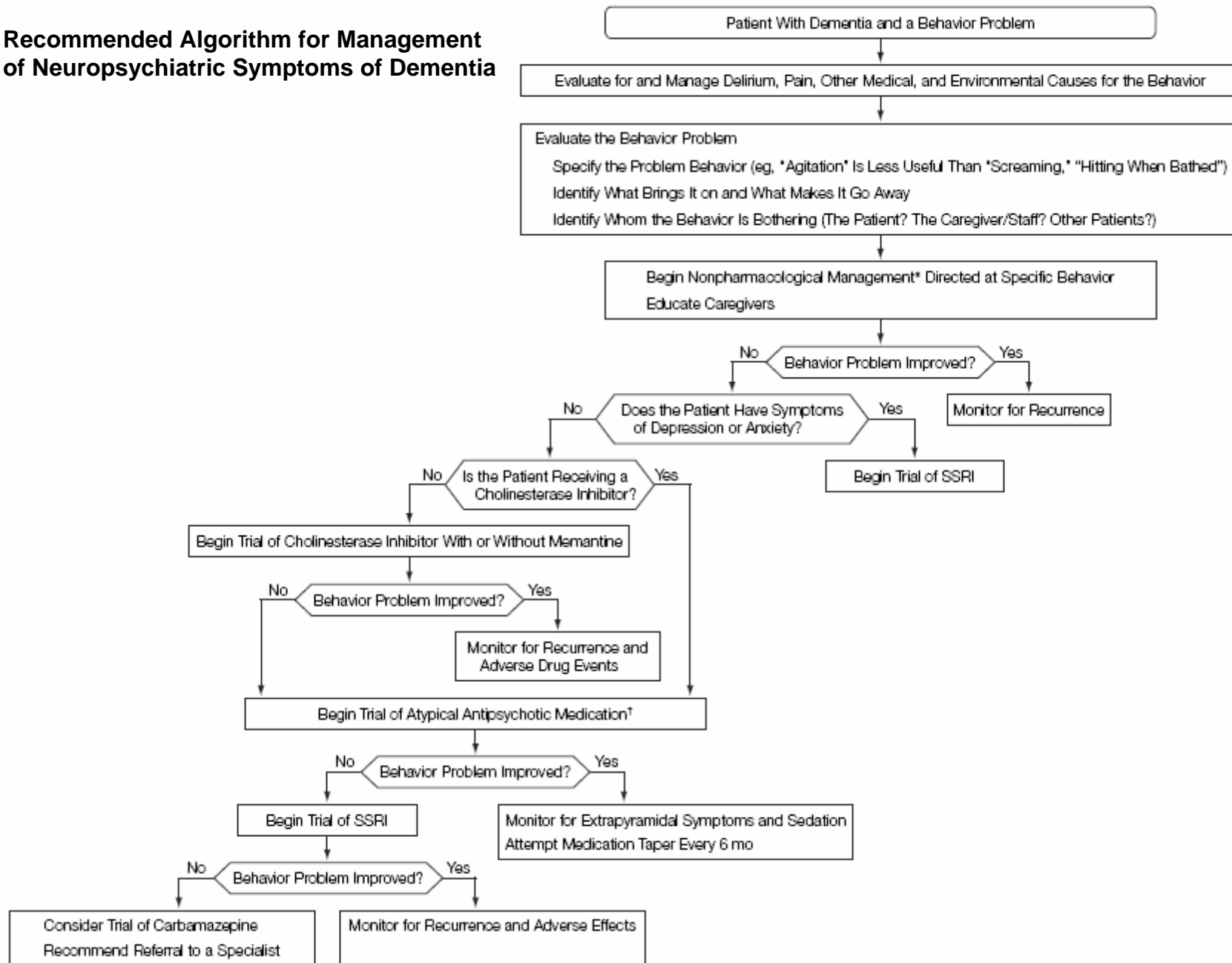
2 = Treat underlying causes (eg. antibiotics, pain management, drug change/reduction esp benzodiazepines/anticholinergics)

3 = Consider Environment, Communication, Task, Caregiver style, Other

4 = Consider Cueing, Titrate stimulation to avoid understimulation (esp in early dementia) or overstimulation (esp in more advanced dementia)



Recommended Algorithm for Management of Neuropsychiatric Symptoms of Dementia



SSRI indicates selective serotonin reuptake inhibitor.

*Music therapy, aromatherapy, pet therapy, or other approaches.

†Caution is advised in patients with dementia with Lewy bodies.

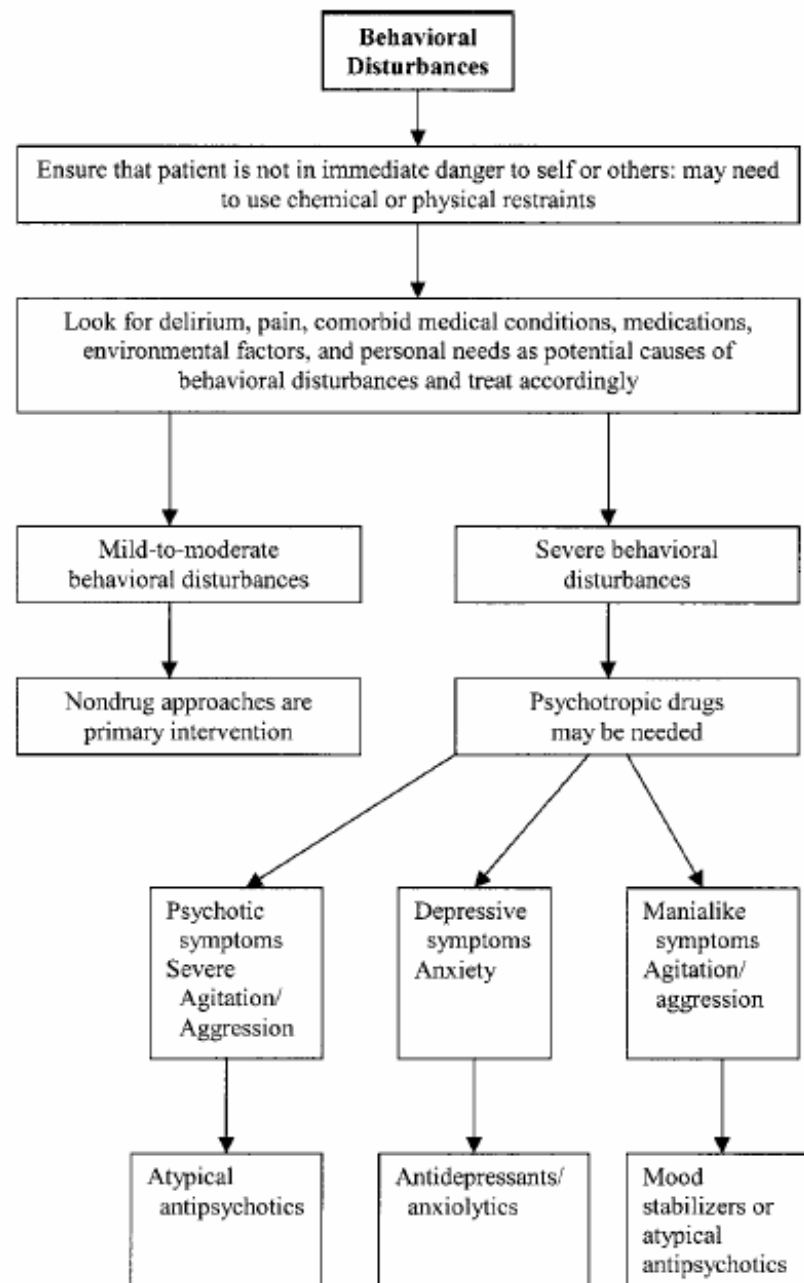


Figure 1. An algorithm for the management of behavioral disturbances in patients with Alzheimer's disease (AD).

Drug Treatment of BPSD

- Before initiating drug treatment, consider:
- What is the indication for drug treatment?
 - Specify and follow target symptom ('clusters')
 - For some forms of BPSD, drugs are either ineffective (eg. screaming) or inappropriate (eg. wandering → wandering and falling)
 - Goals of treatment: ↓patient/caregiver distress, ↓disability, ↓danger to self/others
 - Regular follow-up (cf. OBRA-87 guidelines in US); reassess need for drug (eg. q3months)

Drug Treatment of BPSD

- Antipsychotics
 - Typical, atypical antipsychotics
- Antidepressants
 - SSRIs, trazadone
- Benzodiazepines
- Anticonvulsants
 - divalproex, carbamazepine
- Cholinesterase inhibitors
- Other agents
 - memantine, buspirone, beta blockers, others



Summary/Key Points

- “One size does not fit all” – remember that atypical/protean presentations are common, and a detailed history, exam & selected tests are necessary to sort out initial differential dx
- If it seems like BPSD – try to characterize nature/severity, use ABC approach/other non-pharmacological approaches first
- Drugs have narrow therapeutic index and should be reassessed often

Questions