Dementia Management: Medication and More

PRIMARY CARE ROUNDS, MAY 27, 2021

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Learning Objectives

1. Know when to start, stop, or switch cholinesterase inhibitors and/or memantine
2. Understand risks and benefits of other medications and non-pharmacological alternatives
3. Know how to holistically and systematically assess treatment effectiveness

Dementia prevention, intervention, and care: 2020 report of the Lancet Commission

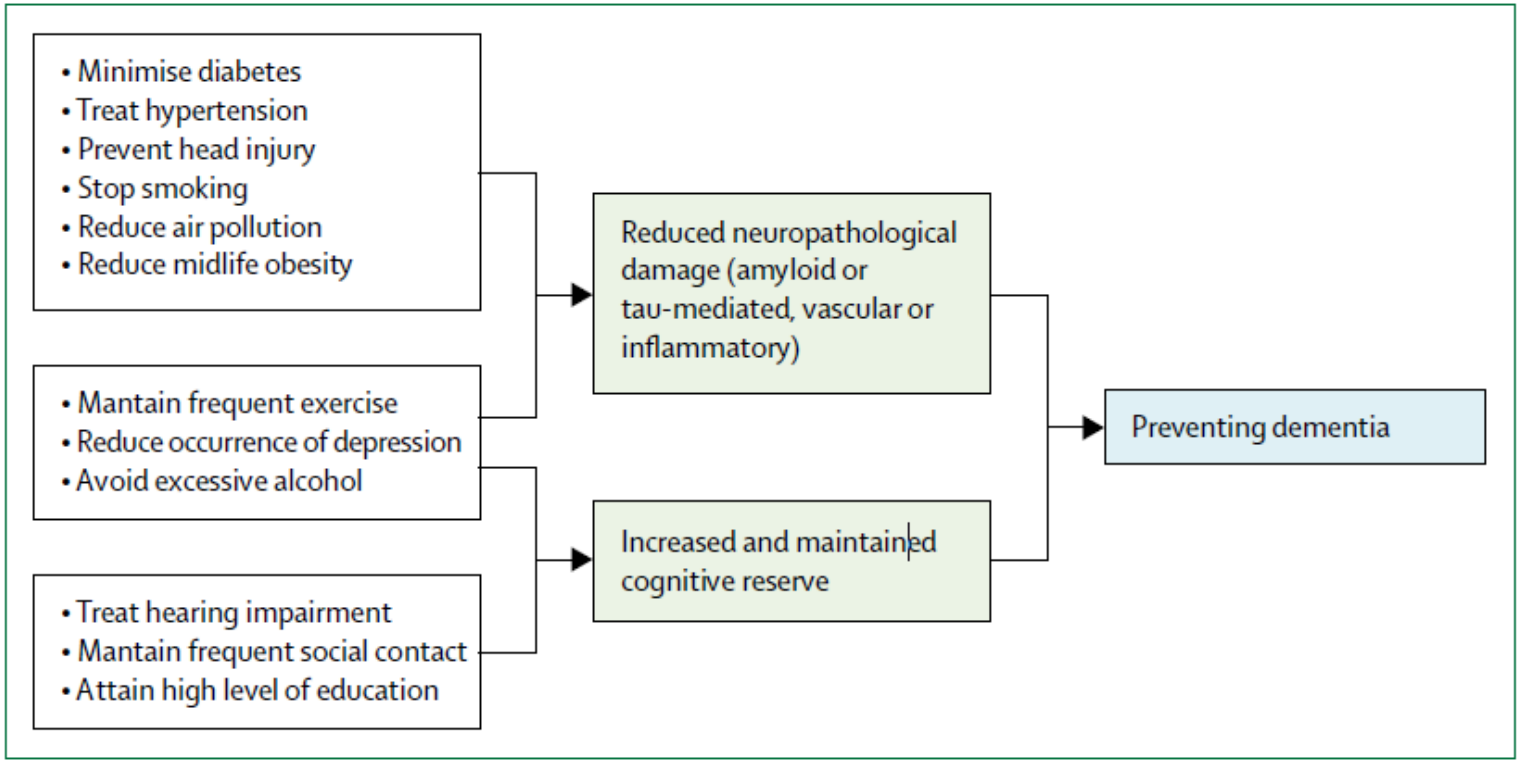

Figure 2: **Possible brain mechanisms for enhancing or maintaining cognitive reserve and risk reduction of potentially modifiable risk factors in dementia**

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PERSPECTIVE

Recommendations of the 5th Canadian Consensus Conference on the diagnosis and treatment of dementia

Zahinoor Ismail[1] | Sandra E. Black[2] | Richard Camicioli[3] | Howard Chertkow[4] | Nathan Herrmann[5] | Robert Laforce Jr.[6] | Manuel Montero-Odasso[7,8] | Kenneth Rockwood[9] | Pedro Rosa-Neto[10] | Dallas Seitz[11] | Saskia Sivananthan[12] | Eric E. Smith[11] | Jean-Paul Soucy[13] | Isabelle Vedel[14] | Serge Gauthier[15] | the CCCDTD5 participants

- 1st CCCDTD was in 1989
- 5th CCCDTD is the first to include non-pharmacological treatments

Dementia risk reduction, 5th CCCDTD

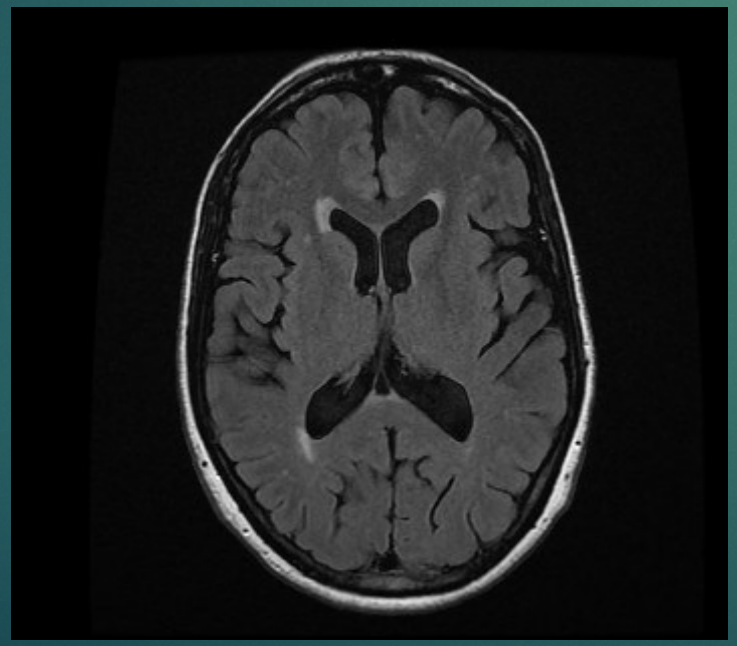
- Mediterranean diet; avoid saturated fatty acids; increase fruit and vegetable intake
- Physical activity of at least moderate intensity (aerobic exercise and/or resistance training)
- Dance interventions and mind-body exercise (e.g. Tai Chi, Qigong)
- Screen for hearing loss; audiologic rehab +/- hearing devices
- Sleep history; target 7-8 hours sleep per night; insufficient evidence to recommend insomnia treatment
- Computer-based or group cognitive training; cognitively stimulating pastimes, volunteering, life-long learning
- Minimize medications with anticholinergic properties

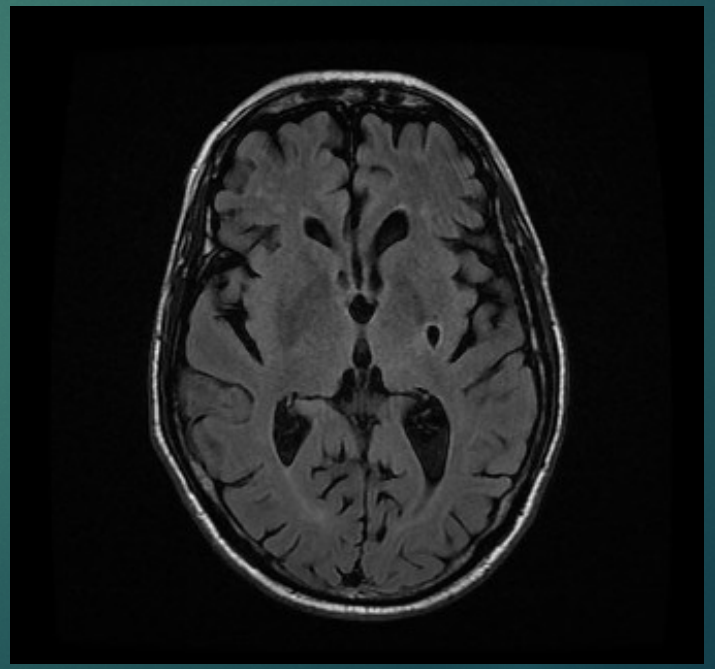
Antihypertensives

- Treating HTN may reduce risk of dementia
- Assess, diagnose, and treat HTN according to guidelines from Hypertension Canada
- If a vascular contribution is suspected, treat if diastolic $\geq$ 90 mmHg and if systolic $\geq$ 140 mmHg (consider target < 120 mmHg if associated vascular risk factors)

Aspirin

- Not recommended for patients with MCI or dementia who have brain imaging evidence of covert white matter lesions of presumed vascular origin without Hx of stroke or brain infarcts
- If there are covert brain infarcts on neuroimaging, but no Hx of stroke, the use of ASA is reasonable, but the benefit is unclear



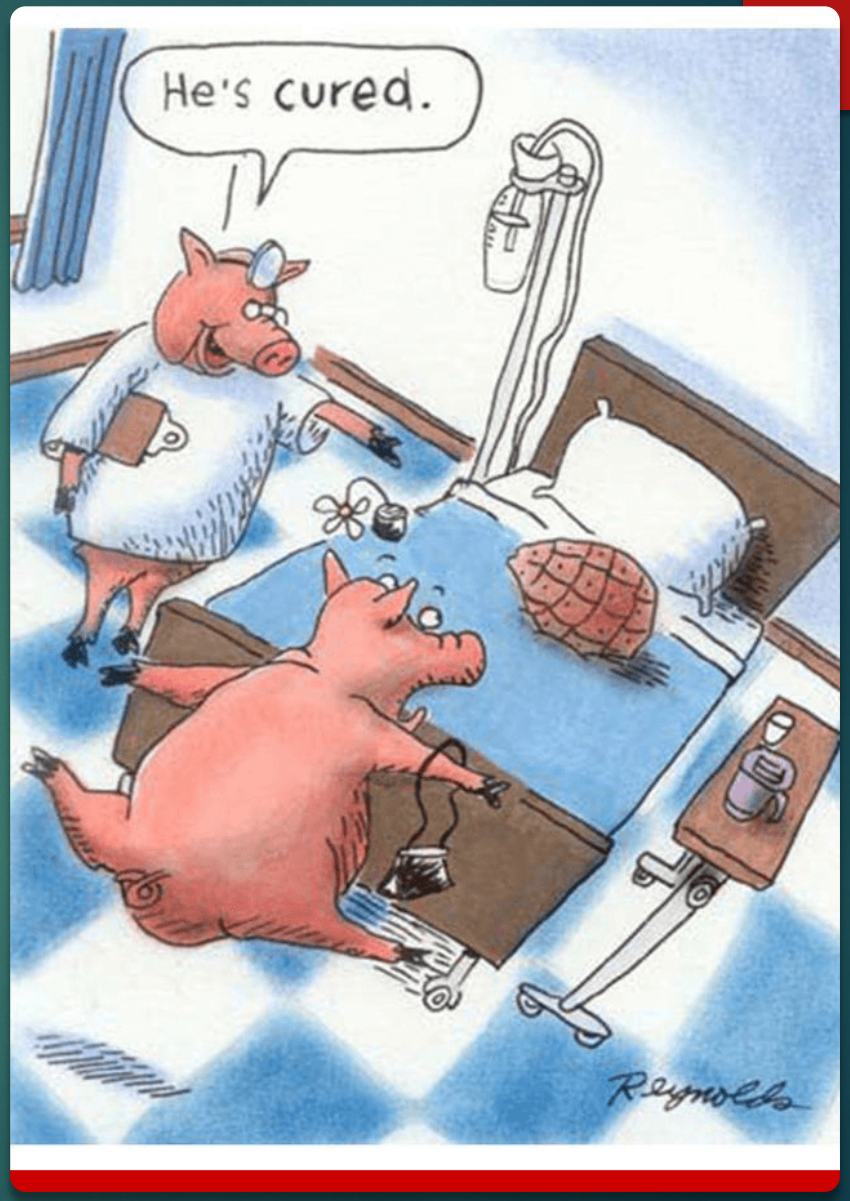


Dementia management: Why?

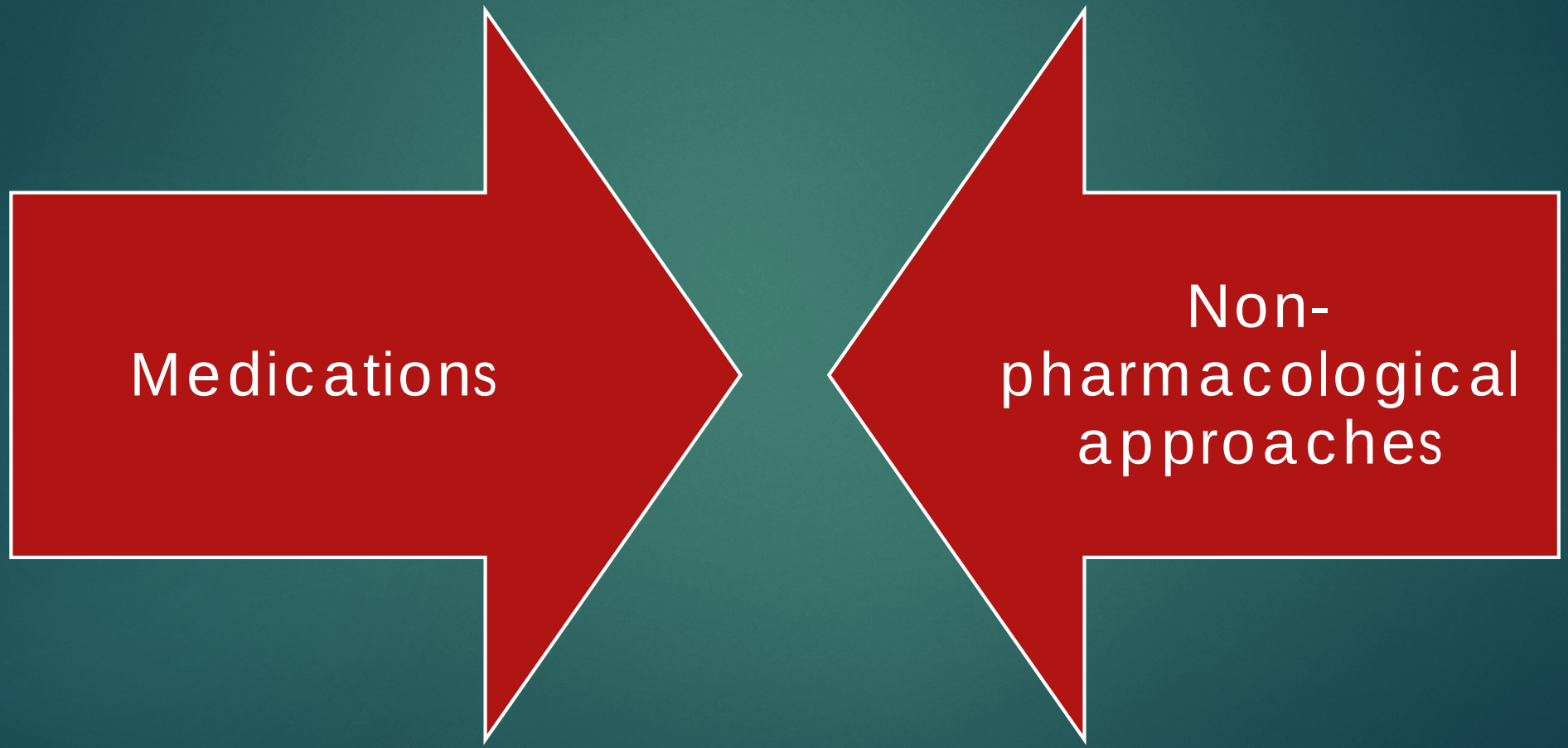
There is no cure.

There is no “slowing of progression.”

1. Enhance / maintain cognition
2. Enhance / maintain functional status
3. Treat symptoms
4. Consider the caregiver



Dementia Management: Evidence or Art?



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- Comprehensive
- Informed by both the Evidence and the Art

Is the treatment working?

- Tracking treatment response and change over time should be individualized
- Requires a multi-dimensional approach plus caregiver or reliable informant input.
- Do not rely on a single tool or clinical domain (e.g. MMSE score)
- Reassess every 6 to 12 months (more frequently if there are behavioural symptoms)

The ABCC's of treatment response

Is there a particular target symptom or symptoms?

- A: ADL's and IADL's: is there improvement or stabilization of function?
- B: Behaviour: are the specific "target symptoms" better?
- C: Cognition: how do post-treatment cognitive tests compare to pre-treatment?
- C: Caregiver health: burden / resilience

ADL's and IADL's

Assessing function is integral in the follow up of treated patients

- Disability Assessment in Dementia (DAD)
- Functional Assessment Staging Scale (FAST)
- Functional Activities Questionnaire (FAQ)
- The Older Americans Resources and Services Multidimensional Functional Assessment (OARS)
- The Barthel Index Score

Behaviour

"Response behaviours", behavioural and psychiatric symptoms of dementia (BPSD)

- Neuropsychiatric Inventory brief version (NPI-Q)
- Mild Behavioural Impairment Checklist (MBI-C); need reliable informant
- The Geriatric Depression Scale (GDS); less sensitive with disease progression
- The Cornell Scale for Depression in Dementia
- The Patient Health Questionnaire (PHQ-9)

Cognition

<5 min

- Memory Impairment Screen (MIS) + Clock
- Mini-Cog
- AD8
- 4-item MoCA
- GP Assessment of Cognition

10-15 min

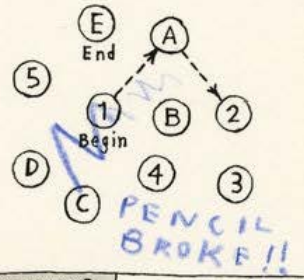
- MoCA
- 3MS
- MMSE
- RUDAS

>45 min

- TorCA
- DCQ
- Neuropsychological testing

COGNITIVE ASSESSMENT (WRITTEN) NAME: D.TRUMP

VISUOSPATIAL / EXECUTIVE

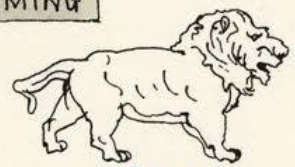


Copy cube

cube

Draw CLOCK (ten past eleven)

NAMING



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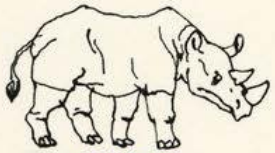

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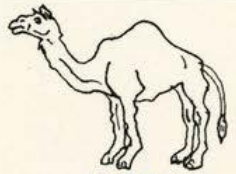


BOB

ATTENTION What number comes next?

1,000,000,000 • 1,000,000 • 10,000 • CHAPTER 11

ABSTRACTION Which doesn't belong?

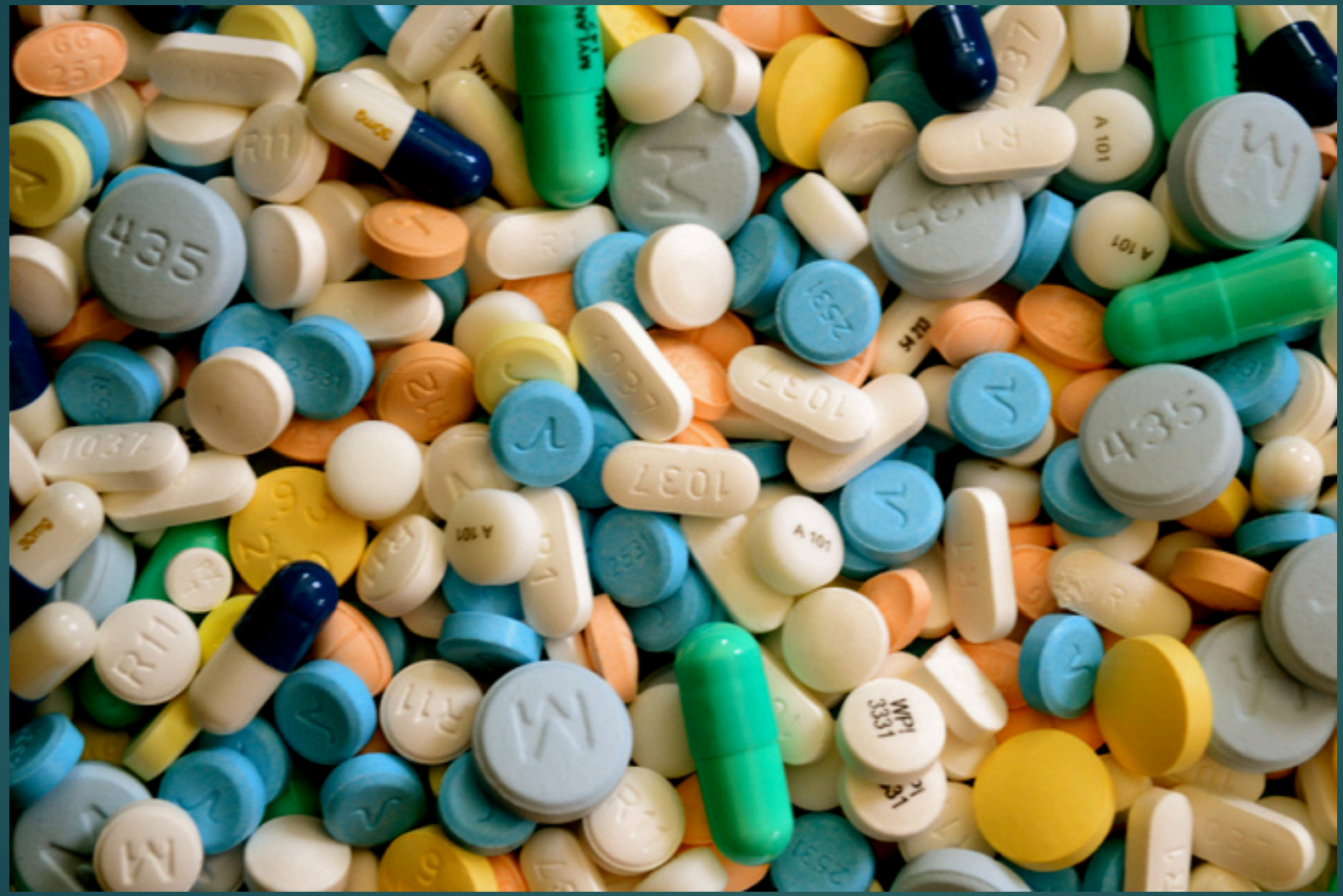
LANGUAGE Use one word to describe each month:

SLEEPY	January	PENCIL NECK	July
CROOKED	February	FAILING	August
LYIN'	March	CRYIN'	September
LOW IQ	April	LITTLE	October
CHEATIN'	May	SNEAKY	November
LOW ENERGY	June	CRAZY	December

Caregiver

- Caregiver burden is a major determinant of hospitalization and long term care placement
- Zarit Burden Interview
- The Resilience Scale
- Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE)
- The HABC-Monitor

“Start low, go slow!”



Cholinesterase inhibitors (ChEI)

- Donepezil (Aricept)
- Galantamine (Reminyl)
- Rivastigmine (Exelon)

- Indicated for Alzheimer's disease, Parkinson's Disease Dementia, Dementia with Lewy Bodies, Vascular Dementia
- Not indicated for subjective cognitive decline, Mild Cognitive Impairment (MCI), frontotemporal dementia, or other neurodegenerative conditions
- Assess anticholinergic burden of other medications

When to avoid cholinesterase inhibitors?

- Not wanted
- Absolute contraindications (e.g. 2nd or 3rd degree AV block, asthma)
- Relative contraindications (e.g. seizure disorder, anorexia, frailty)
- Life expectancy less than 6 months
- Frontotemporal dementias unlikely to have an Alzheimer component (e.g. Pick's disease, or behavioural variant FTD)

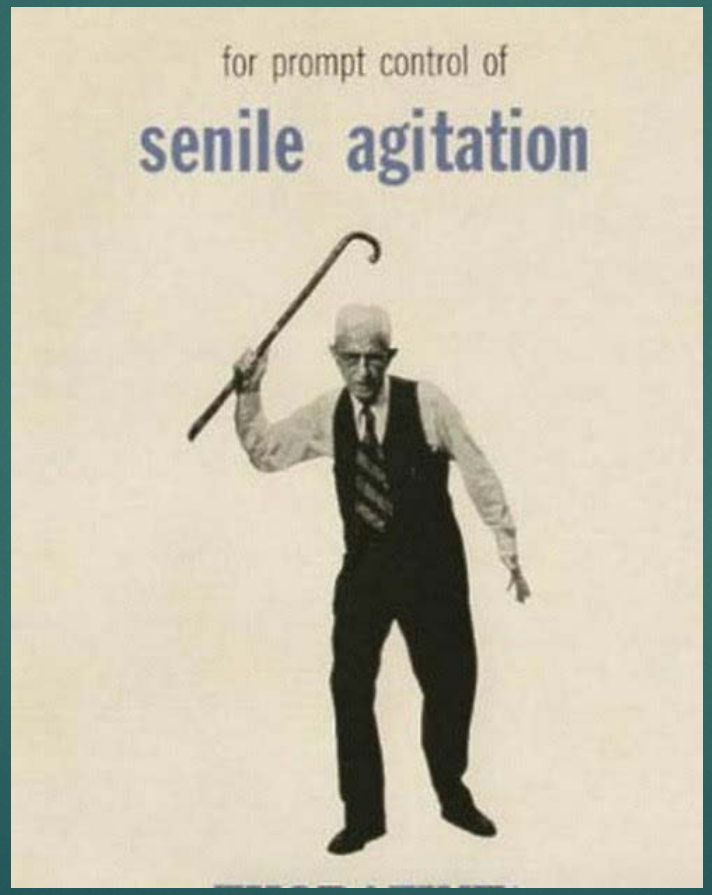
Switching cholinesterase inhibitors

- Switching not indicated for perceived lack of benefit
- Consider switching if side effects limit treatment
- Donepezil covered by Pharmacare with special authority
- Galantamine covered by Pharmacare if donepezil caused side effects
- Rivastigmine (oral) covered by Pharmacare if donepezil caused side effects
- Rivastigmine patch not covered but better tolerated

Memantine

- Indicated for Alzheimer's disease, Parkinson's Disease Dementia, Dementia with Lewy Bodies, Vascular Dementia
- Indicated for moderate to severe stage dementias listed above
- Not indicated for subjective cognitive decline, Mild Cognitive Impairment (MCI), frontotemporal dementia, or other neurodegenerative conditions
- Not covered by Pharmacare

Behavioural and psychiatric symptoms of dementia (BPSD)



Behavioural and psychiatric symptoms of dementia (BPSD)

Table 2- Examples of BPSD Usually not Amenable to Antipsychotic Treatment

• wandering	• vocally disruptive behaviour	• inappropriate voiding
• hiding and hoarding	• inappropriate dressing /undressing	• eating inedible objects
• repetitive activity	• tugging at seatbelts	• pushing wheel chair bound residents

Note: Try to avoid use of antipsychotics if possible for residents with dementia due to Parkinson's disease or Lewy Body dementia. Cholinesterase inhibitors are the first line of treatment for residents with psychosis and aggression associated with these type of dementias. Cholinesterase inhibitor drugs are covered by the Ministry of Health through the Alzheimer Drug Therapy Initiative.

Managing behavioural symptoms

Nonpharmacological Strategies

Cognitive Enhancers

Sedative/hypnotics

- Melatonin
- Trazodone
- Nozinan
- Benzodiazepines

Antidepressants

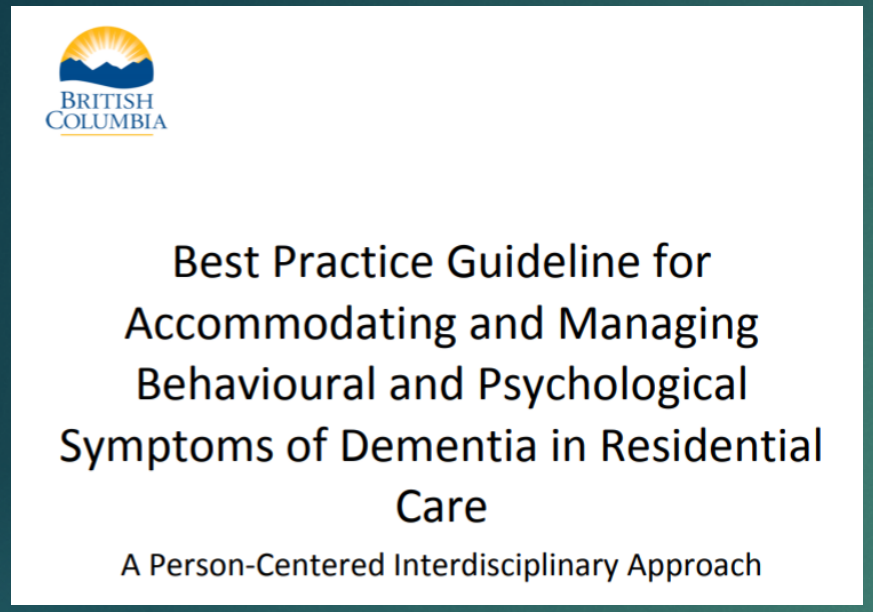
- Trazodone
- SSRI's

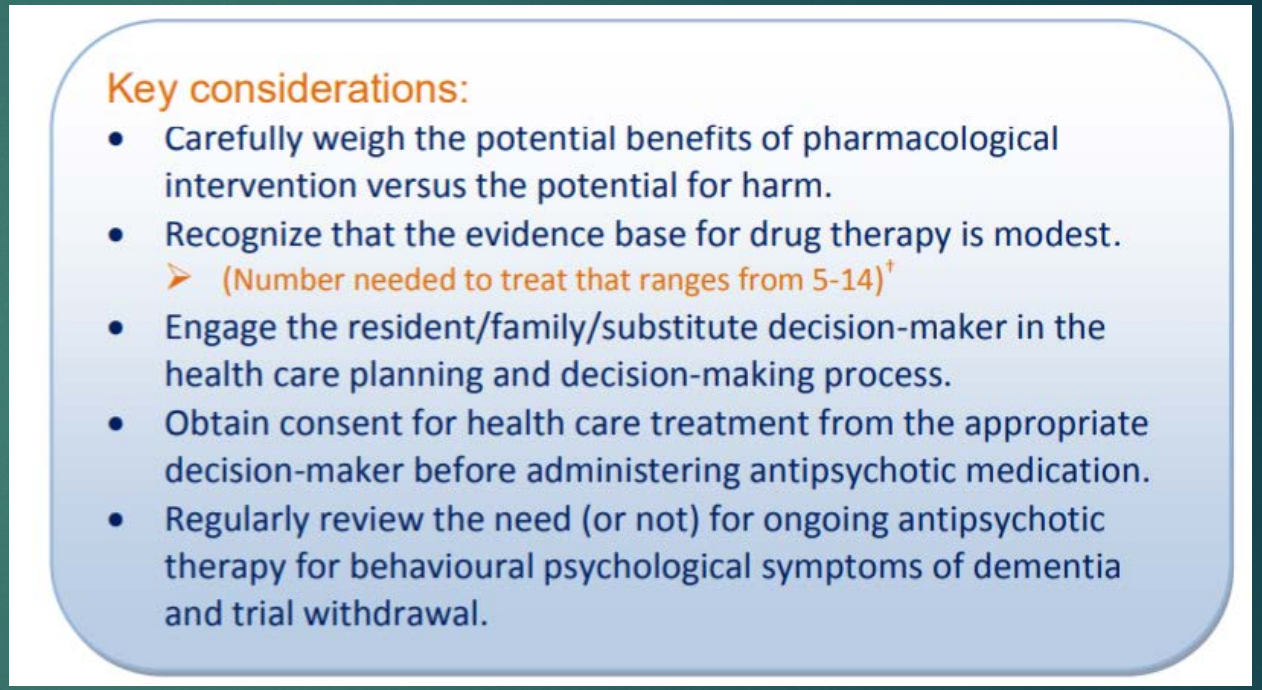
Antiepileptics

- Gabapentin
- Pregabalin

Atypical antipsychotics

- Haloperidol
- Risperidone
- Loxapine
- Olanzapine
- Quetiapine

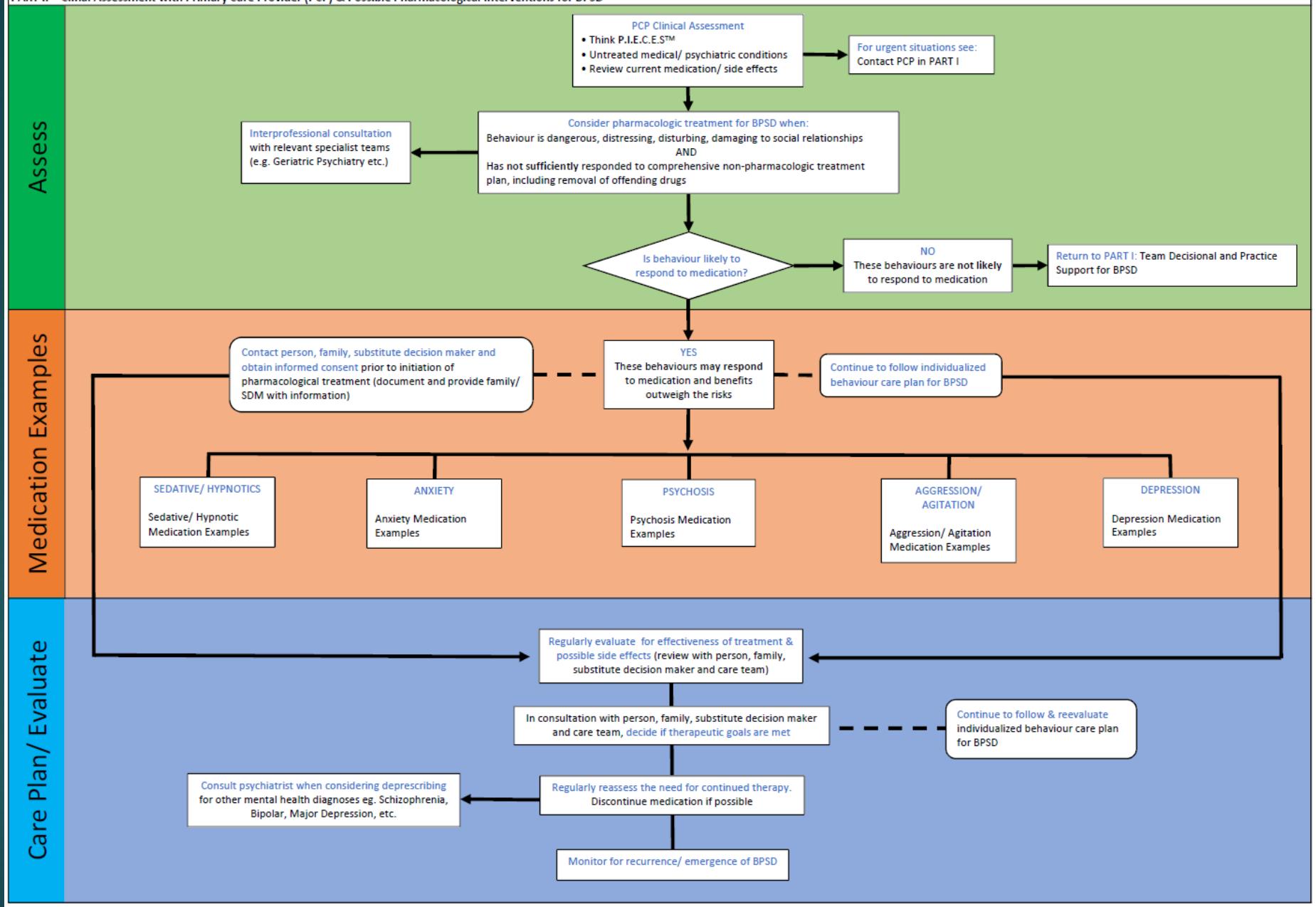




Physical restraints exacerbate behavioural symptoms.

Behavioural and Psychological Symptoms of Dementia (BPSD) in Long Term Care — June 2019

PART II - Clinal Assessment with Primary Care Provider (PCP) & Possible Pharmacological Interventions for BPSD



For further information refer to: BC Best Practice Guideline for Accommodating and Managing Behavioural and Psychological Symptoms of Dementia in Residential Care 2012. www.health.gov.bc.ca/library/publications/year/2012/bpsd-guideline.pdf

Canadian Coalition for Seniors Mental Health (CCSMH). National Guidelines for Senior's Mental Health: The Assessment and Treatment of Mental Health Issues in Long-Term Care 2014. https://ccsmh.ca/wp-content/uploads/2016/03/2014-ccsmh-Guideline-Update-LTC.pdf

When to stop ChEI and/or memantine?

- *Clinically meaningful* worsening of dementia as reflected in changes in cognition, functioning, or global assessment
- Worsening cannot be attributed to other medical conditions (e.g. delirium) or environmental factors (e.g. moving into LTC)
- No meaningful benefit (improvement in target symptom, stabilization, or decreased rate of decline) was ever seen
- Severe or end-stage dementia
- Intolerable side effects
  - ChEI: nausea, vomiting, anorexia, weight loss, falls
  - Memantine: confusion, dizziness, falls
- Poor medication adherence precludes safe ongoing use or inability to assess medication effectiveness

How to Deprescribe

- Reduce gradually
- Reduce dose by 50% every 4 weeks
- Discontinue after 4 weeks on the recommended starting dose
- Reinitiate treatment if patient shows clinically meaningful worsening of cognition, function, behaviour that appears to relate to cessation of therapy
- Do not deprescribe ChEI in patients with psychosis, agitation, or aggression until these symptoms have stabilized (unless symptoms appear to have worsened with ChEI initiation or increase in dose)

Psychosocial interventions

Individual

- Exercise
- Group cognitive stimulation therapy
- Caregiver psychoeducational interventions

Community

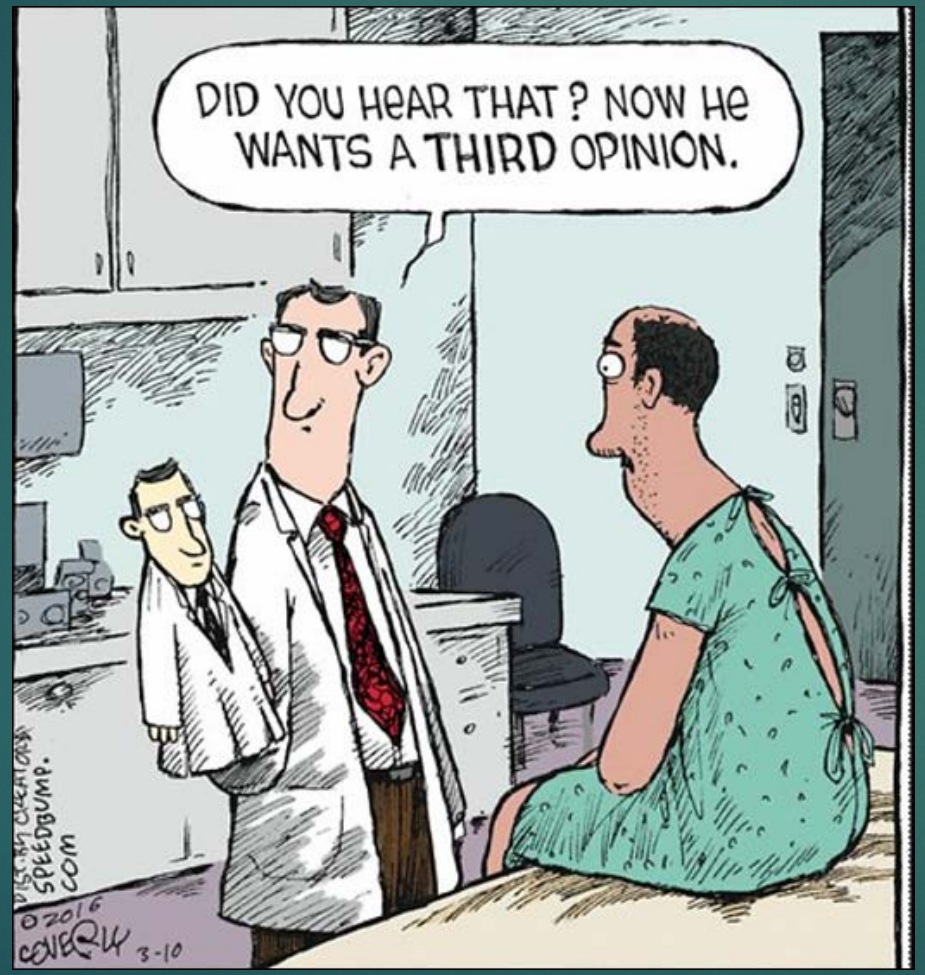
- Dementia friendly organizations/communities
- Case management

Case History

Dementia Management Key Points

- Strongly consider non-pharmacological interventions
- Avoid anticholinergics if possible
- Cholinesterase inhibitors and memantine are the only “cognitive enhancers”
- Use sedative/hypnotics, antidepressants, anticonvulsants, antipsychotics sparingly and with caution
- “Start low, go slow”
- Evaluation of treatment response is multidimensional … ABCC’s

Questions?



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