# Medications in BPSD

## The good, the bad and the ugly


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# Case example: Norman

- 79M dementia diagnosed 2019
- NH resident since 2020 as socially isolated
- Increased hospital attendances from Nov 2020
  - Falls
  - Aggression
  - Confusion

# Norman cont'd

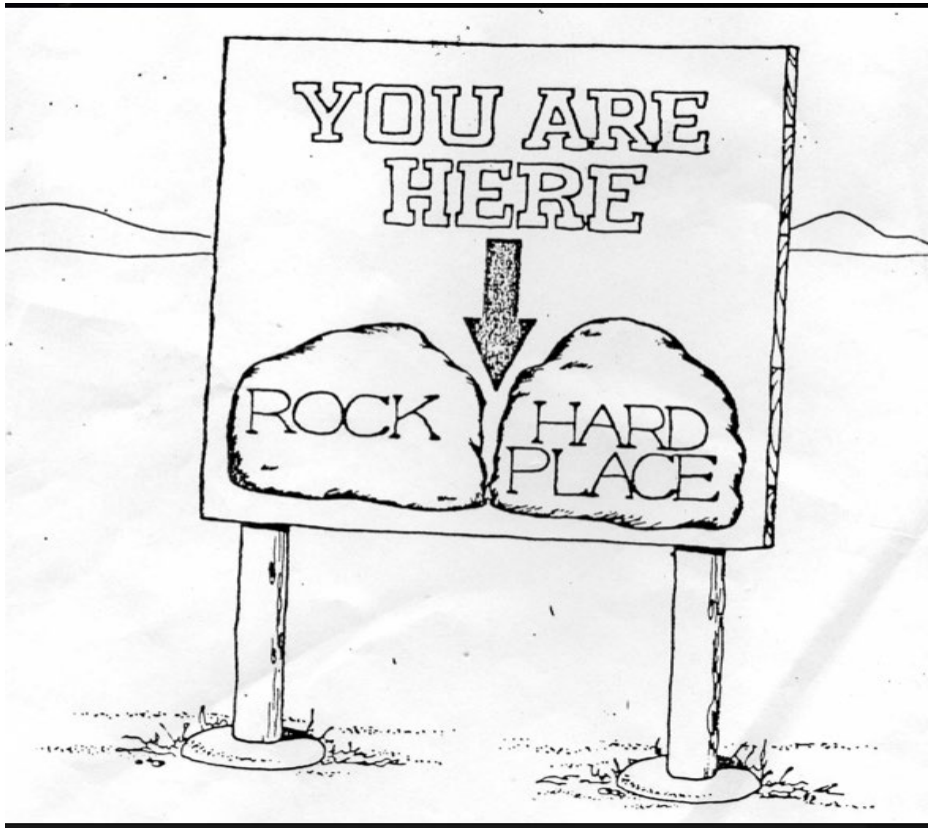
- Behaviour chart
  - Swearing, yelling
  - Wandering
  - Restless, agitated
  - Punching
  - Inappropriate hygiene habits
  - No predictability

- Relevant medications
  - Risperidone 0.25mg → 2mg
  - Oxazepam 15mg + PRN 7.5mg
  - Escitalopram 20mg
  - Clonazepam 0.5mg
  - Haloperidol 0.5mg
  - Buprenorphine patch 10microg

# BPSD management: expectation

- Goals
  - Symptom control
  - Improved quality of life
  - Reduced caregiver burden

# BPSD management: reality



# Challenges and considerations

- Individual variability
- Limited evidence base
- Multiple adverse effects

Pharmacological management is NOT a substitute for non-pharmacological approaches.
Non-pharmacological strategies should be continued alongside pharmacological treatment.

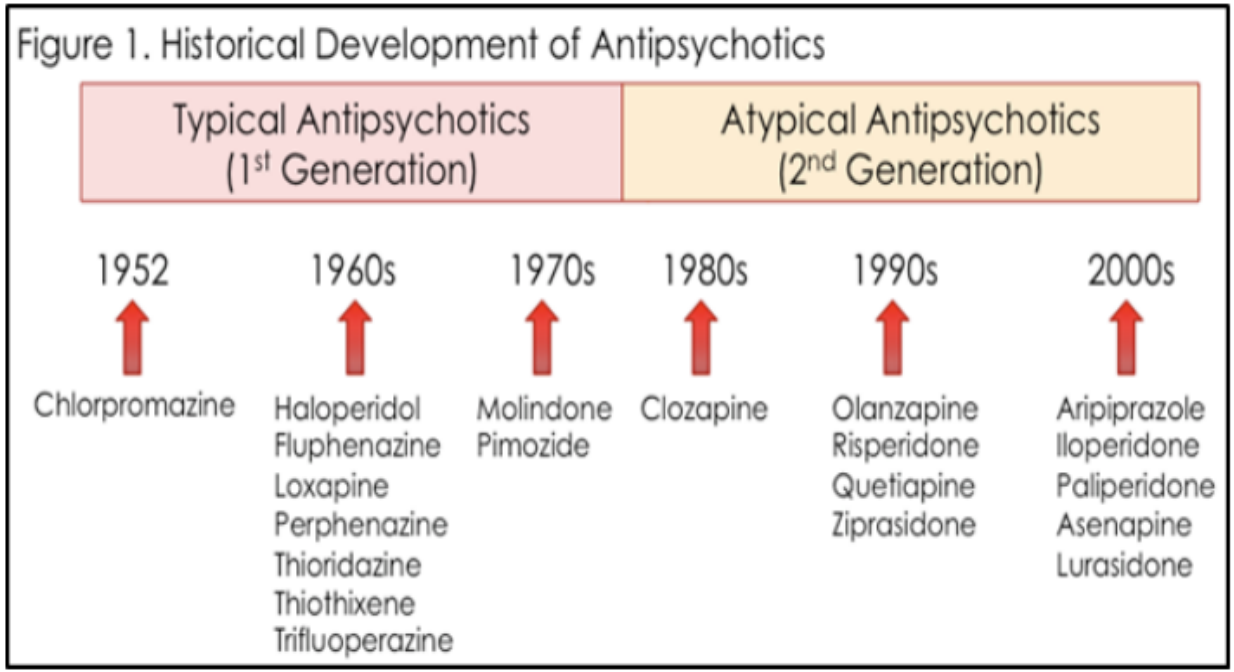
# Step one:
# Treat any causative/contributing factors

- Physical
- Insomnia
- Pain

# Medications

- Antipsychotics
- Antidepressants
- Anxiolytics
- Mood stabilisers

# Overview of antipsychotic medications



# Commonly used antipsychotics in BPSD

- Risperidone
- Quetiapine
- Olanzapine
- Haloperidol

# How long does it take to work?

| | Time to peak | Elimination |
|---|---|---|
| Risperidone | 1hour | 3-22h |
| Olanzapine | 6hours | 31-52h |
| Olanzapine IM | 15-45min | |
| Quetiapine | 1-1.5hours | 7-12h |
| Haloperidol | 2-6h | 14-37h |
| Haloperidol IM | 20min | |

**Table 2: Wilcoxon (Gehan) survival analysis to compare mean of time to first response in four groups**

| Groups | Mean±SD (day) | Min, Max (day) | *P* |
|---|---|---|---|
| Olanzapine | 8.44±2.2 | 6, 12 | |
| Risperidone | 3.60±1.9 | 2, 6 | |
| Haloperidol | 6.60±2.5 | 2, 10 | |
| Thiothixene | 6.20±2.9 | 2, 10 | |
| Total | 6.15±2.9 | 2, 12 | <0.003 |

SD=Standard deviation

**Antipsychotics are medicines that can reduce symptoms of psychosis but have limited benefit for BPSD**

## Antipsychotics are overused for BPSD

Use of antipsychotics in Australia is **high** for BPSD in all settings

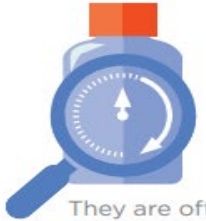
Around **1 in 5** residents in Australian aged care homes are prescribed at least one antipsychotic medicine


Guidelines recommend that antipsychotics **should not be used** as first-line treatment for BPSD

## Inappropriate use of antipsychotics is a problem

For every **five** people with dementia given an antipsychotic, **only one will benefit**

Antipsychotics can cause harm and **increase the risk** of stroke, pneumonia and fractures



They are often used for **too long**, and without proper consent or monitoring

**Only one antipsychotic (risperidone) is approved for BPSD** on the PBS, and only to be used:

- on authority script for 12 weeks
- for dementia of Alzheimer's type with psychosis and aggression, and
- after non-pharmacological interventions have failed.

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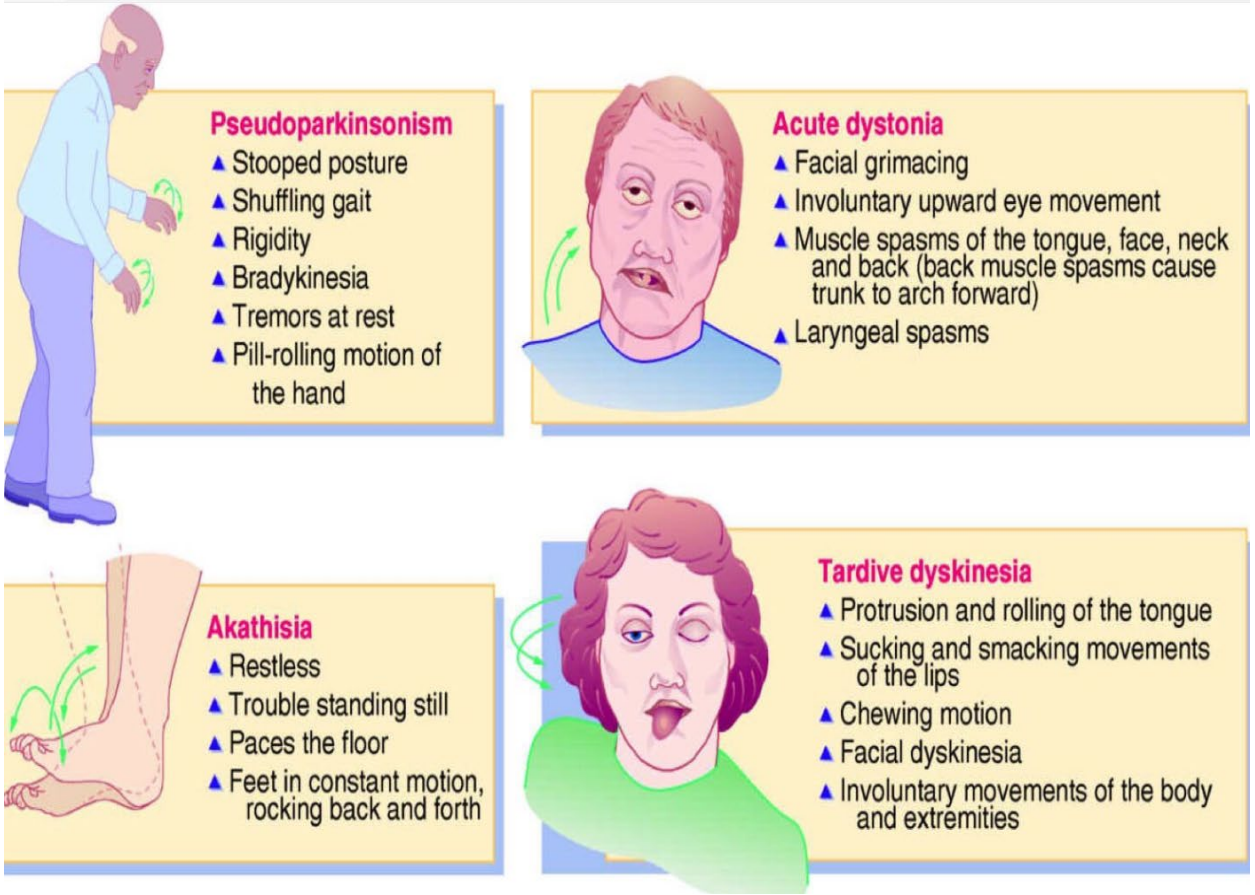
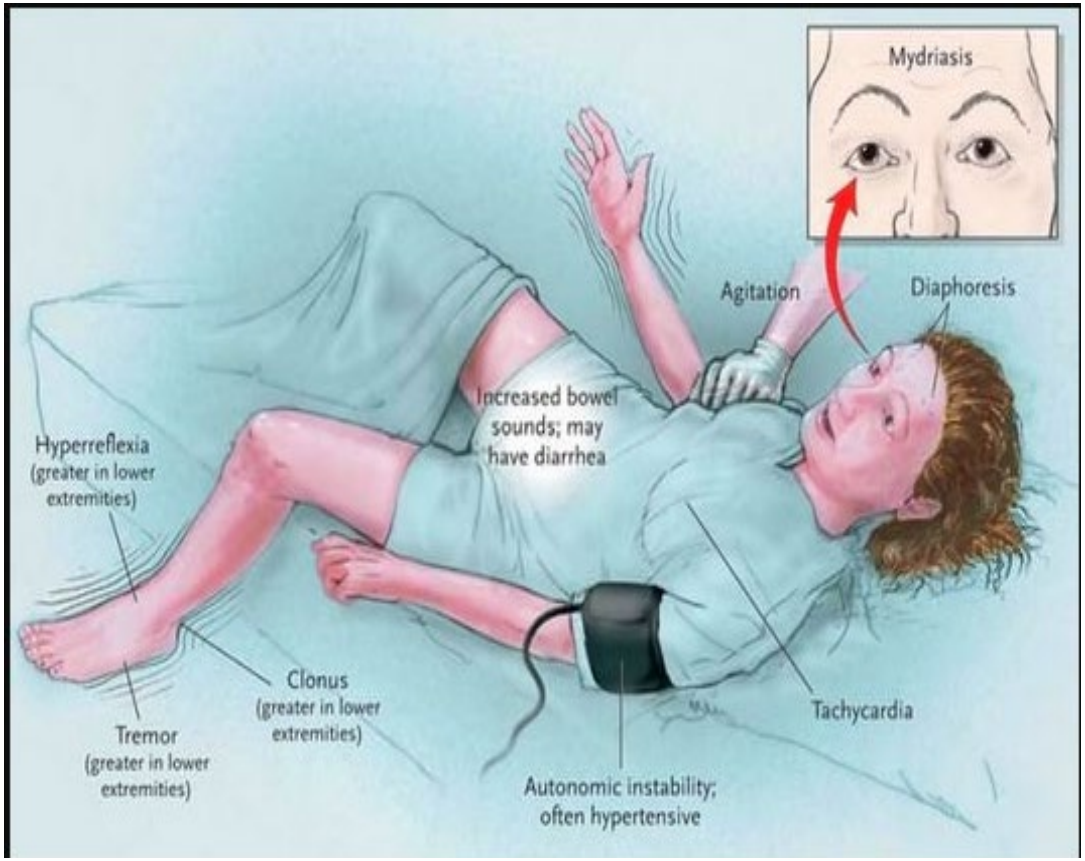
# Effects of antipsychotics

- Number needed to treat: 4-12
- Number needed to harm: 100

- Risks
  - Extrapyramidal side effects
  - 3x Stroke risk
  - Metabolic side effects
  - Mortality risk in elderly patients






EPOMEDICINE
Mnemonics, Simplified knowledge & Thoughts

# Parkinson's Disease (PD) and Lewy Body Dementia (LBD)

- More sensitive to antipsychotics
- Can have worsening of symptoms

- Avoid Haloperidol

# Case example: Arthur

- 73M mixed dementia Jan 2022
- Admitted with failure of independent living
- 5 month admission
- Smashing property
- Yelling at staff
- Exit-seeking

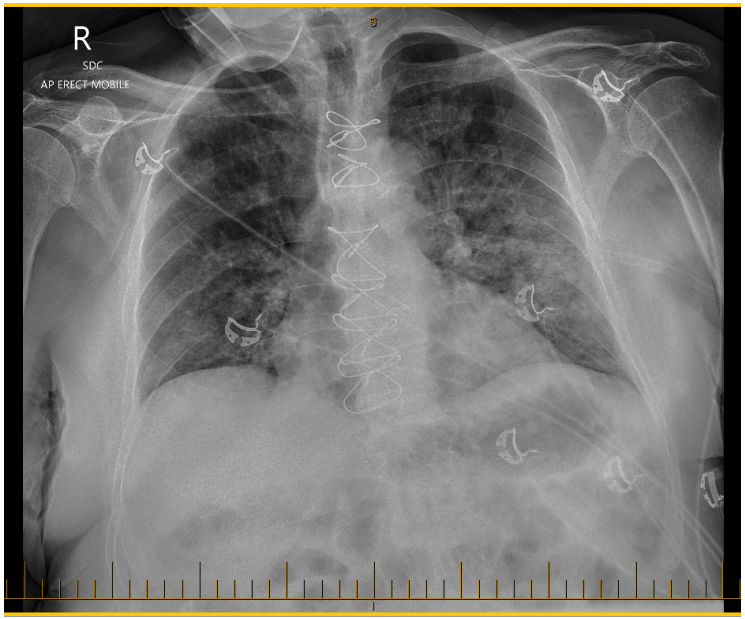
# Arthur: cont'd

- Risperidone over-sedating
- Carbamazepine contraindicated
- Concerns about Valproate toxicity
- 3 falls
- Parkinsonism
- Leg swelling
- 7kg Weight gain

- Relevant discharge meds
  - Olanzapine 2.5mg bd
  - Sodium valproate 1g bd
  - Oxazepam 7.5mg PRN

# Arthur: cont’d

- Readmitted 6 weeks later
- Covid pneumonitis
- RIP



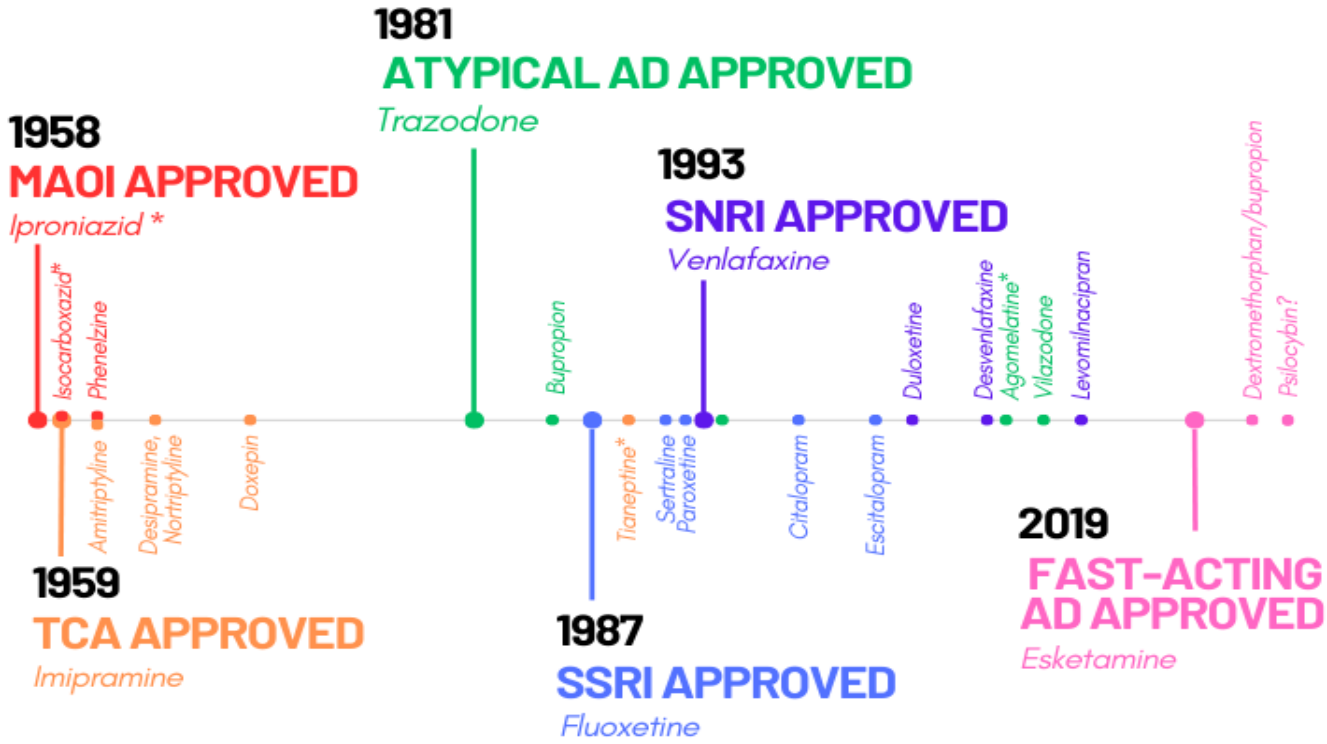
# Guidelines for antipsychotic use

- Reserved for severe, risky cases
- Individualised treatment plans and regular medication reviews

# Antidepressant medications

- Aims to improve mood, reduce agitation, enhance well-being

# A BRIEF HISTORY OF ANTIDEPRESSANT DRUG DEVELOPMENT

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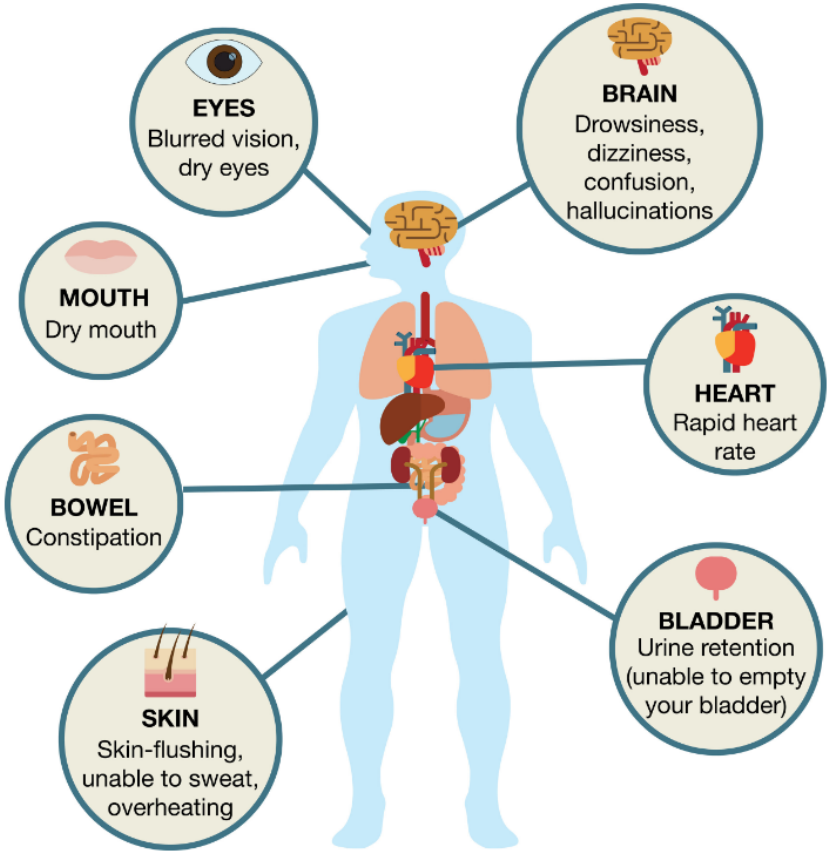
# Antidepressant use: considerations

- Side effects
  - Sedation
  - Anticholinergic effects
  - Falls risk
- Drug interactions




Canadian Medication Appropriateness and Deprescribing Network

# Anxiolytics

- Use in managing anxiety and agitation
- Benzodiazepines e.g. Lorazepam, Diazepam

# How long does it take to work?

| | Time to peak | Elimination |
|---|---|---|
| Oxazepam | 1-4h | 5-15h |
| Temazepam | 1-2h | 8-15h |
| Lorazepam | 1-6h | 10-20h |
| Clonazepam | 1-2h | 18-50h |
| Diazepam | 1-2h | 20-80h |

# Anxiolytic use: considerations

- Sedation risk
- Falls and fracture risk
- Paradoxical reaction
- Dependency

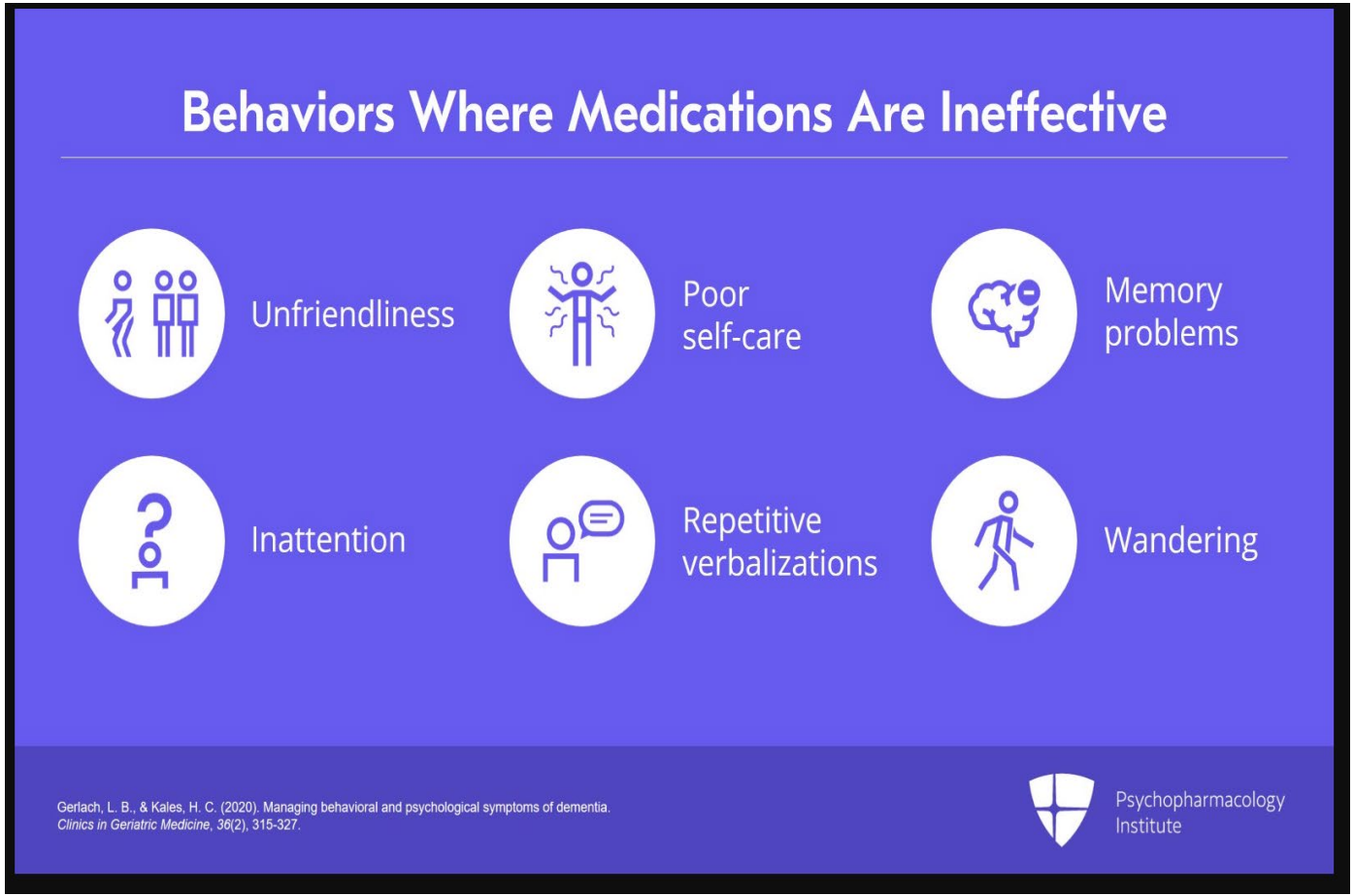
# Mood stabilisers

- Regulate mood fluctuations, control impulsive behaviour

- Sodium valproate
- Carbamazepine
- Lithium

# Mood stabilisers: considerations

- GI disturbance
- Sedation
- Tremors
- Weight gain
- Cognitive impairment


Behaviors Where Medications Are Ineffective
Unfriendliness
Poor self-care
Memory problems
Inattention
Repetitive verbalizations
Wandering
Gerlach, L. B., & Kales, H. C. (2020). Managing behavioral and psychological symptoms of dementia. Clinics in Geriatric Medicine, 36(2), 315-327.
Psychopharmacology Institute

# Case example: Harold

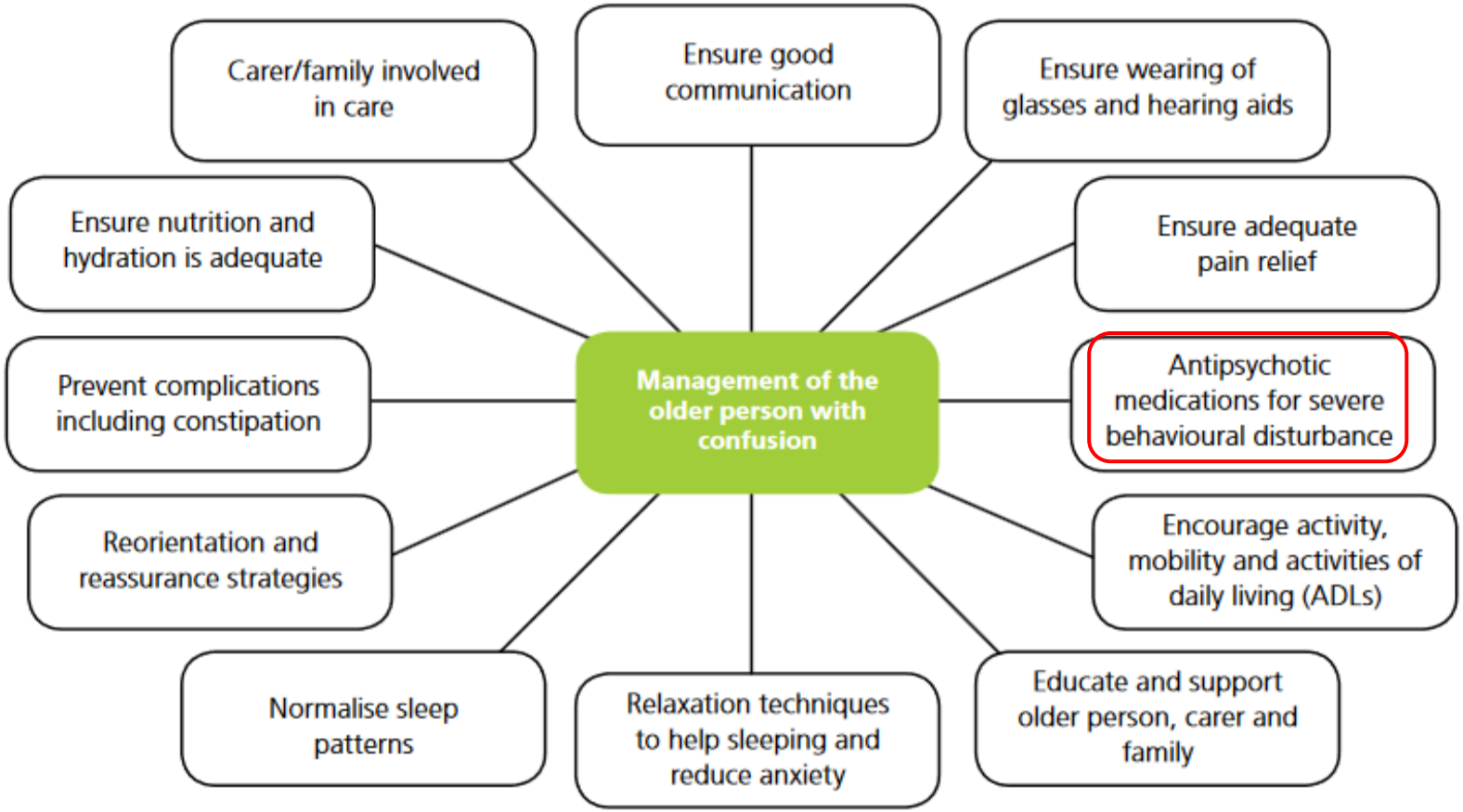
- 91M vascular dementia

- Lives with son Albert who cares for him
- Thinks Albert stealing his wallet and getting into the roof
- Thinks people listening to his calls and giving info to police

# Individualised medication plans

- Consider symptom severity
- Medication tolerability
- Drug interactions
- Patient/caregiver preferences
- Medication review

**Figure 4: Management of the older person with confusion (adapted from AHMAC, 2000)**



# Case: Back to Norman

- No falls
- Makes his bed in the day
- Helps out around the facility
- 2 reports of physical aggression in the evening
- Monitor sleep
- Monitor food and fluid
- Monitor pain
- Monitor bowels

- Updated relevant medications
  - Escitalopram 20mg
  - Buprenorphine patch 10microg
  - Risperidone 0.5mg bd
  - Oxazepam PRN 7.5mg

# Summary

- There are varied presentations for BPSD
- Not all symptoms warrant or respond to medications
- Individualised, MDT management plans
- Good non-medication strategies can enhance treatment efficacy and minimise need for high-risk medication
- Judicious use of medications with close monitoring of side effects and regular med reviews

# Thank you!

**Any questions?**