Management of Neuropsychiatric Symptoms of Dementia

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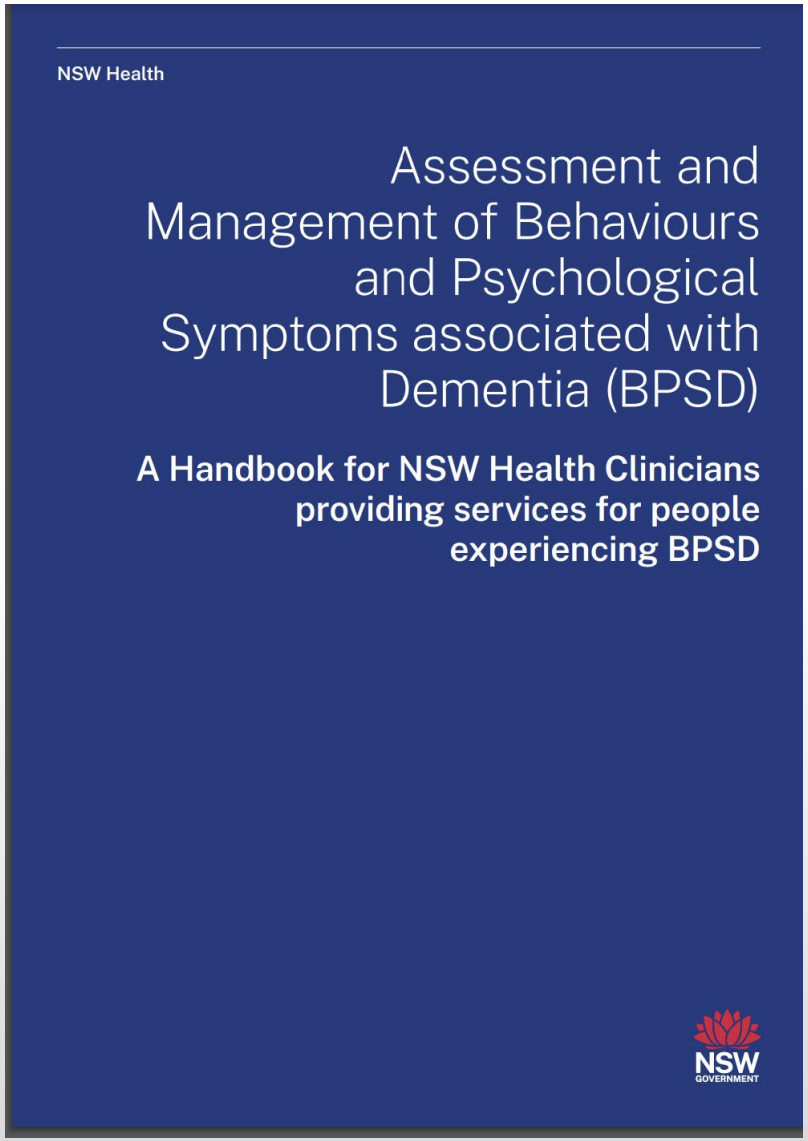
NSW Health
Assessment and Management of Behaviours and Psychological Symptoms associated with Dementia (BPSD)
A Handbook for NSW Health Clinicians providing services for people experiencing BPSD
NSW GOVERNMENT

Older Australians

-Dementia is the **second leading cause** of death of all Australians.

-Dementia is the **leading cause** of death for women.

-In 2022, it was estimated that there were **401,300** (AIHW estimate) Australians living with dementia. Based on AIHW estimates, this is equivalent to 15 people with dementia per 1,000 Australians, which increases to 84 people with dementia per 1,000 Australians aged 65 and over.

-In 2023, it is estimated that **more than 1.5 million** people in Australia are involved in the care of someone living with dementia.

-**More than two-thirds** (68.1%) of aged care residents have moderate to severe cognitive impairment.

Dementia Australia

Behavioural and Psychological Symptoms associated with Dementia

The term behavioral and psychological symptoms associated with dementia (BPSD) is controversial; many prefer ‘changed behaviours’.

BPSD refers to the non-cognitive presentations of dementia, such as agitation, aggression, psychosis, depression and apathy.

BPSD typically presents in the middle to later stages of dementia, with up to 90% of people with dementia experiencing at least one BPSD during the course of the disease.

BPSD are associated with significant carer stress, increased duration of hospitalisation, greater likelihood of placement in a residential aged care facility, and possibly faster decline and death.

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Behavioural and Psychological Symptoms associated with Dementia

Agitation

-Aggressive

- Physical aggression
- Vocalizing/shouting
- Verbal insults

-Non-aggressive

- Pacing
- Restlessness
- Wandering
- Purposeless motor behaviour

Psychosis

-Delusions

-Hallucinations

Mood/Anxiety/Sleep

-Depression

-Euphoria

-Apathy

-Irritability

-Sleep disturbance

-Appetite/eating

-Obsessive ruminations

Personality Changes

-Disinhibition

-Withdrawing

-Hypersexuality

Behavioural and Psychological Symptoms associated with Dementia

The course of BPSD varies.

Hallucinations and mild depression may resolve over a few months, although delusions, agitation and severe depression may be more persistent.

In end stage dementia, some behaviours become less prominent such as depression and delusions, although apathy continues to increase with dementia severity.

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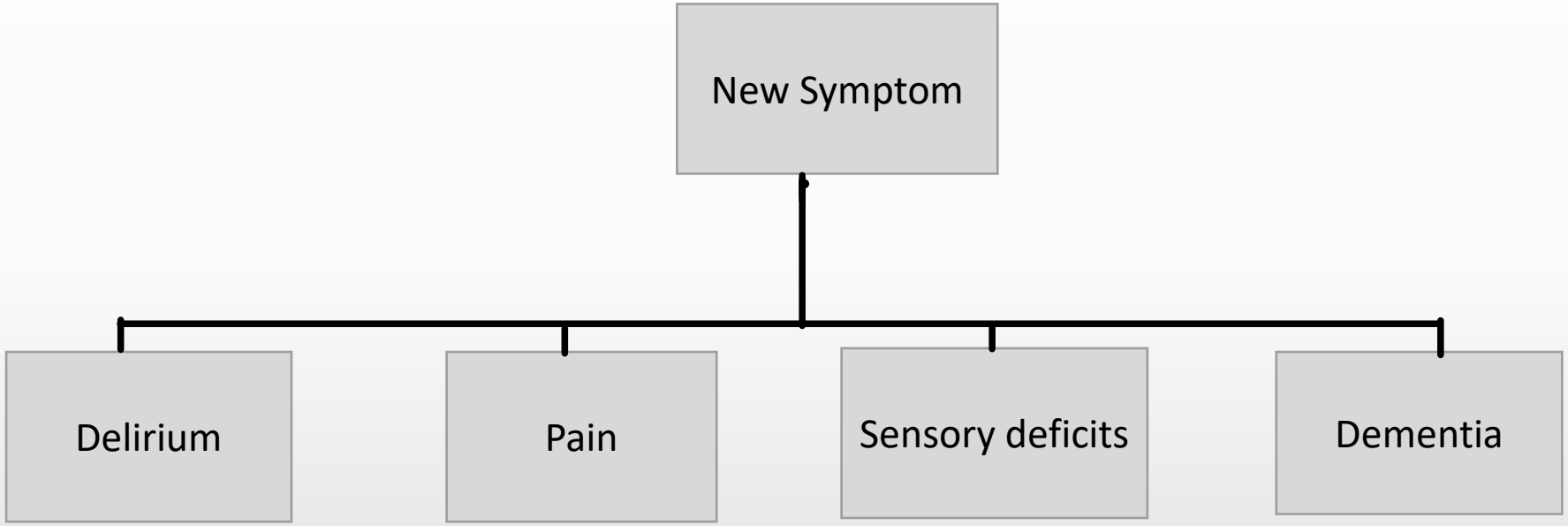
Assessment of BPSD



Non-pharmacological treatment

-Always consider non-pharmacological treatment as first-line for treatment of neuropsychiatric symptoms; however, if symptoms are very distressing to the person with dementia or their carer or there is a potential for danger to self or others related to these symptoms, consider medications

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-It is important to remember that all behavior is an attempt to communicate, e.g. to express discomfort, fear or thirst, or to request something such as a drink or information

-Use person centered approach: work with their carer, describe the behaviors rather than naming them, identify precipitating events, understand the context and contributing factors, determine the risks, and consider the multiple factors contributing to the behaviors and prioritize solutions when devising a care plan

(BPSD)

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Non-specific non-pharmacological interventions

Modify the environment

-ensuring the person's room or bedside area has objects they still recognise, e.g. personal items such as photos may need to change to older ones

-displaying signs to assist orientation, if required

-developing an area for the person to walk safely

-changing night lighting

-removing or covering mirrors.

Modify activities

-Obtaining knowledge about what they liked doing before dementia, their preferred music, movies, pastimes, hobbies, reading and their preference for physical activities. These activities may help divert the person and thereby avoid the escalation of behaviours.

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Specific non-pharmacological interventions

- There is some evidence for psychological interventions and alternative therapies. They have no or very few adverse reactions.

- Aromatherapy/hand massage
- Music therapy - individualised
- Psychological interventions including validation therapy, reminiscence therapy, orientation therapy
- Sleep hygiene
- Pet therapy

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Non-pharmacological treatment

-Involve as many people and many services as possible

-Encourage carers to have help – ACAT/community package, Council assistance, day centres for daytime activities/social interactions

-Refer to Dementia Australia

- If more tricky behaviours, refer to Dementia Behaviour Management Advisory Service and psychogeriatric services

Pharmacological Treatment

-Many types of drugs have been trialed in the management of BPSD, but most have **limited** evidence of effectiveness.

Antidepressants

Mostly ‘off label’ use unless they meet the criteria for major depression

Most of the RCTs have used either citalopram or sertraline

For mild depression in dementia - two large RCTs did not demonstrate benefit of SSRI antidepressants or mirtazapine over placebo combined with nonpharmacological care. Antidepressants hence have a role in moderate to severe depression not in mild depression.

For the treatment of agitation, aggression and psychosis with SSRIs, the strongest evidence is for citalopram having benefit, with weaker evidence for sertraline. Benefits take up to 9 weeks to *emerge,* so they are not useful in urgent cases.

Although citalopram has the strongest evidence, concerns have emerged about cardiac side effects and prolongation of the QTc interval. If used, the dose range in older people is 10-20mg daily with regular monitoring of the QTc interval.

Antidepressants

Sertraline has weaker evidence of benefit but does not prolong the QTc interval. The dose range commences at 25mg daily increasing to 50mg after a week to a maximum dose of 100mg daily.

Other SSRIs such as escitalopram, paroxetine, fluvoxamine and fluoxetine have not been adequately studied in people with dementia.

Of the other antidepressants mirtazapine was ineffective in a major trial in treating depression or agitation in dementia and venlafaxine has had limited research,

tricyclic antidepressants such as amitriptyline, dothiepin and doxepin, should not be used because of the risk of increased confusion.

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Antipsychotic medication

We have several RCTs on both first and second generation antipsychotics. The best evidence involves the use of atypical or second generation antipsychotics including risperidone, aripiprazole, quetiapine and olanzapine. The results from these studies suggest modest benefits and the potential for clinically significant adverse effects.

Risperidone is the only second generation antipsychotic that is on PBS for BPSD. It is the recommended first line in most guidelines for the treatment of aggression and psychosis in Alzheimer's disease commencing at 0.5mg daily (in frail persons 0.25mg) to a maximum of 2 mg daily. It is less effective for agitation. It should be avoided in patients with dementia with Lewy Bodies.

Antipsychotic medication

Quetiapine has much a weaker evidence base for effectiveness. It has a greater risk of sedation and cognitive side effects. It is better tolerated in patients with dementia with Lewy bodies but with little effect on psychosis. If used, commence at 25 mg and gradually titrate to the maximum dose of 200mg daily or 100mg daily if frail.

Olanzapine has modest evidence of efficacy in reducing BPSD but the adverse effects including anticholinergic effects on cognition, metabolic syndrome and risk of cardiovascular disease outweigh the benefits apart from acute use in the very short term. The dose range is 2.5mg to 7.5mg daily.

Aripiprazole is the second line antipsychotic with recent review finding to have an optimal combination of safety and efficacy for BPSD, particularly on psychosis and agitation. Commence at 2.5mg daily aiming for 5mg after 2 weeks to a maximum of 15mg daily.

Antipsychotic medication

There are several risks associated with the use of antipsychotics including increased mortality.

i. Increased risk of stroke and other cerebrovascular events

ii. Confusion and decline in cognition – olanzapine and quetiapine are more sedating than risperidone.

iii. Neurological adverse effects:

a. akathisia: subjective motor restlessness, manifesting as an inability to sit down, pacing

b. parkinsonism including tremor, stooped gait, limb rigidity – less with olanzapine, quetiapine, more with risperidone

c. neuroleptic malignant syndrome (NMS) – severe parkinsonism (rigidity), autonomic instability, confusion, elevated white cell count and CK enzymes.

iv. Metabolic adverse effects particularly with olanzapine a. weight gain b. hyperglycaemia c. hypercholesterolaemia.

v. Falls

vi. Anticholinergic side effects – dry mouth, constipation, urinary outflow impaired, narrow angle glaucoma exacerbated – less with risperidone, more with others

Antipsychotic medication

Reserve antipsychotics for when symptoms are distressing to patients, or the patient poses an imminent danger to themselves or others.

At the time of prescribing, discuss treatment goals and establish a timeline for review of symptoms.

Risperidone requires a telephone authority for initial treatment for up to 12 weeks. For people who have a significant response to risperidone and have not responded to nonpharmacological treatment, a management plan should include formal documented review and plan for cessation of treatment.

The authority requires detailed instructions or discussion with a psychiatrist, geriatrician or other medical practitioner, monitoring of adverse effects, cessation if harms outweigh benefits, and trials of reduction or cessation of therapy with maintenance of non-pharmacological treatment all to be documented in the medical record.

Use of risperidone for BPSD in other types of dementia or other antipsychotic drugs in any type of dementia is 'off label'. However, the maximum period of 12 weeks initial treatment and the processes of review for continuation, tapering and discontinuation still apply.

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If medications are indicated, the following hierarchy is recommended:

1. **Analgesics** – for agitation, most commonly paracetamol 500gm ii tds for agitation; (may use buprenorphine transdermal patch if already on paracetamol)
2. **Antidepressants** – for depression, sometimes for psychosis; short acting SSRI; best evidence is for citalopram (and by inference escitalopram): if potential for QT prolongation is risky may choose sertraline,
3. **Antipsychotics** for aggression, agitation, psychosis – only risperidone is PBS approved
4. **Cholinesterase inhibitors** – limited evidence for benefit except for Lewy body dementia
5. **Memantine** – limited evidence for benefit
6. **Benzodiazepines** – short term benefit for anxiety and agitation
7. **Anticonvulsants** – for agitation, poor evidence, use in consultation with appropriate specialist

Principles of Treatment

Non-pharmacological treatments are first line

Many symptoms have remissions or fluctuate and may improve over several weeks

If pharmacological interventions pursued:

-Start with least harmful and progress

-If treatment carries risk, discuss with patient and family

-Make attempts at withdrawing therapy, if possible