Assessment of patients with BPSD

Differential Diagnosis

It is often useful to take a step back to ascertain if the person actually has a confirmed diagnosis of dementia, because several conditions can present with dementia-like symptoms.

It is important to distinguish dementia from depression or delirium.

These three conditions (sometimes referred to as the 3Ds) often co-exist but severe depression can present as a dementia-like illness (pseudodementia) and delirium can be caused by infections, drug toxicity, alcohol withdrawal and metabolic disturbances.

Differential features of the 3Ds are presented in Table 1 but there is considerable overlap.

The important issue is to attempt to identify the symptoms of depression or delirium, as distinct from dementia, in order to select the appropriate treatment, which may involve the removal of a precipitating factor.

Table 1. Some differential features of the 3Ds; Delirium; Depression and Dementia

Feature	Delirium	Dementia	Depression
Onset	Usually sudden. Often at twilight.	Chronic and generally insidious.	Often abrupt and coinciding with life changes.
Duration	Hours to < one month. Rarely longer	Months to years.	Months to years.
Progression	Abrupt	Slow but even	Variable and uneven
Memory	Impaired. Sudden *immediate memory loss may be noticeable.	Impaired	Selective or patchy
Thinking	Disorganised, slow, incoherent.	Scarcity of thought, poor judgement; words hard to find.	Intact with themes of hopelessness.
Sleep	Nocturnal confusion.	Often disturbed; nocturnal wandering	Early morning wakening.
Awareness	Reduced	Clear	Clear
Alertness	Fluctuates; lethargic or hypervigilant	Generally normal	Normal
Attention	Impaired, fluctuates	Generally normal	Minimal impairment but easily distracted.

***Memory, Immediate** - The ability to recall numbers, pictures, or words immediately following presentation. Patients with immediate memory problems have difficulty learning new tasks because they cannot remember instructions. Relies upon concentration and attention.

Examples:

A person with dementia presents with a sudden onset of worsening confusion and delirium.

> *Rule out underlying infection (e.g. UTI) or medicines' adverse effects, especially anticholinergic. It is important to consider all medicines that could be contributing anticholinergic effects and causing confusion (e.g. amitriptyline, ranitidine, diuretics).*

An elderly man presents with dementia-like symptoms following the death of his partner of 60 years. He also has a previous history of depressive illness.

> *Carefully assess the person for depression before considering a diagnosis of dementia.*

Consider contributing factors or triggers

If a person with dementia develops distressing non-cognitive symptoms of dementia they should be assessed to identify possible contributing factors, triggers or unmet needs. (Refer also to Table 2 and Table 3)

Assessment includes:

- Physical health
- Unrecognised or sub-optimally treated pain or discomfort
- Side effects of medication (e.g. constipation, confusion)
- Psychosocial factors
- Physical environmental factors
- Depression
- Behavioural and functional relationships with carers and care workers

Removal, treatment or modification of these factors may reduce or resolve non-cognitive symptoms.

Table 2. Medicines that could precipitate or worsen BPSD

Symptoms	Drugs implicated	Comments
Delirium	Drugs with anticholinergic actions e.g. amitriptyline, oxybutynin.	Elderly patients are often on one or more of these drugs.
	Anticonvulsants e.g. carbamazepine, phenytoin	Includes those that may be used for neuropathic pain, e.g. carbamazepine.
	Lithium: mania can occur with elevated plasma concentrations or toxicity	Increased mania reported when given with some antipsychotics including haloperidol.
Depression	Beta-blockers	
	Some anticonvulsants	
Psychoses	Systemic corticosteroids especially high doses.	Psychiatric symptoms occur in up to 6% of people taking systemic corticosteroids
	Oral NSAIDs.	Reactions to NSAIDs are rare but can go unrecognised.
Confusion	H2 antagonists: Ranitidine Cimetidine	Renal impairment and high doses may increase risk
	Fluoroquinolones: Ciprofloxacin Norfloxacin	

Table 3. Factors that may contribute to or worsen BPSD

Factor	Comments
Unrecognised infections	Especially urinary tract infections
Medication regimen	Check for drugs that may cause or aggravate symptoms (see Table 2)
Electrolyte disturbances	Hyponatraemia and dehydration may cause confusion/delirium. Can be drug induced e.g. antidepressants, diuretics.
Constipation	Pain and discomfort due to untreated constipation may cause distress. Check underlying cause including drugs.
Pain	Unrecognised or untreated pain is common in the elderly and is often difficult to identify and assess in a person with dementia.
Hearing or vision problems	Make regular assessment of sensory function
Environmental factors	Noise, poor lighting, frustration finding facilities (e.g.toilet/bathroom) can cause distress
Co-morbid psychiatric diagnoses	E.g. depression, anxiety

Identify target problems.

There are a host of different challenging behaviours and symptoms that may present in association with various mental illnesses in people living in residential care (Table 4).

Table 4. Common target problems and behaviours observed in elderly people in residential care.

- calling out
- aggression
- agitation
- hallucinations and illusions
- delusions
- wandering
- depression
- elevated mood
- "sundowning"
- extreme anxiety
- resistance or unease towards carers
- intrusive behaviours
- inappropriate sexual behaviour
- inappropriate urination or defaecation
- other inappropriate social behaviours
- day / night reversal
- insomnia
- apathy / motivational failure

Frequently people may exhibit a combination of these behaviours.
As different behaviours are often best approached using different non-pharmacological or pharmacological methods, it is critical for health professionals to first decide which behaviours are being targeted. Identifying target behaviours also allows the response to treatment to be monitored. Rating scales may be employed to identify and quantify behaviours and the response to treatment.

Specific symptoms and behaviours need to be defined as "target problems" in order to plan the best approach to treatment.

Record the target problems and the response to treatment clearly in the patient's notes.

Formulating the target problem

Why is the challenging behaviour or symptom occurring?
Challenging behaviours and symptoms occurring in people in residential care are associated with suffering and can have serious consequences.
It is important to try to understand why a particular symptom or behaviour is being experienced by a particular person at that particular time. This is called "formulating the problem".
It is useful to consider the problem as an expression of unmet need - a communication that challenges others to understand.
It is then possible to ask if care staff, family or health professionals can assist the person to meet their particular need in a more appropriate or healthy way. For example, is their call for attention an expression of pain, boredom, sadness, anxiety or loneliness?

Adapted from bpacMZ better medicine. www.bpac.org.nz (accessed March 2015).