UNIT NO. 5

BEHAVIOURAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA

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ABSTRACT

Behavioural and psychological symptoms of dementia (BPSD) are common and distressing to people with dementia and their caregivers. It is essential that medical causes of BPSD such as delirium be excluded during assessment. For mild to moderate BPSD, non-pharmacological management, such as environmental and behavioural interventions, are effective first line strategies. However, medication may be required for moderate to severe BPSD. Caregiver education, training and support are of paramount importance.

INTRODUCTION

Behavioural and psychological symptoms of dementia (BPSD) are an integral part of dementia. In the original description of Alzheimer's disease 100 years ago, symptoms of paranoia, screaming and hallucinations were present. BPSD, sometimes referred to as non-cognitive or neuropsychiatric symptoms of dementia, are common and occur in up to 90% of patients. They are significant causes of distress for people with dementia and their carers and if untreated can lead to premature institutionalisation.

DEFINITION

BPSD refers to the symptoms of disturbed perception, thought content, mood or behaviour that frequently occur in patients with dementia (Consensus Conference, International Psychogeriatric Association). Table 1 lists some of the common BPSD.

ASSESSMENT

A comprehensive diagnosis of dementia must include an assessment of cognitive and behavioural symptoms as well as the needs of the family. In the initial assessment, any medical causes for the behavioural symptoms must be sought and laboratory tests to exclude treatable causes are necessary (Table 2).

MANAGEMENT

The main objectives in the management of BPSD are to maximise functional independence, improve the quality of life of patients, minimise caregiver stress and distress, and help families cope with the patients' behaviours.

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Table 1: Common Behavioural and Psychological Symptoms of Dementia

BPSD	Common examples
Anxiety	Repeatedly asking questions of an upcoming event Fear of being left alone Worries about their finances
Depressive mood	Pervasive depressed mood or loss of pleasure Self deprecatory statements Expressing wish to die
Hallucinations	Seeing people in the home who are not really there Hearing deceased people call their names
Misidentifications	Not recognising their image in the mirror Mistaking carers for other people Misidentification of events on TV or radio as if they were real
Delusions	People are stealing things House is not one's home Spouse or caregiver is an impostor Spouse is unfaithful
Apathy	Lack of interest in daily activities Decrease in social interaction Decrease in emotional responsiveness Decrease in initiative
Negativism	Refusal to co-operate Resistance to care
Disinhibition	Crying Impulsiveness Verbal aggression Sexual disinhibition – stripping, masturbation
Sleeplessness	Night-time wandering
Agitation	Complex phenomenon Defined as socially inappropriate verbal, vocal of motor activity may include the following:
Physically aggressive behaviours	Hitting Pinching Kicking & biting Slapping Grabbing
Restlessness	Pacing
Screaming	Calling for help, asking to go home, cursing
Wandering	Shadowing/stalking of carer Aimless walking Excessive activity Repeatedly trying to leave the house

Table 2: Some Common Causes of BPSD

Causes	
Delirium	Due to infections, medication, dehydration, metabolic causes etc
Constipation	Faecal impaction
Pain	Arthritis, toothache
Discomfort	Uncomfortable clothing, ingrown toe nail
Sensory impairment	Faulty hearing aid

After comprehensive assessment and treatment of underlying medical causes, specific behavioural or psychological symptoms are then identified. The general principles in management are:

- to understand the cause of the behaviour disturbance e.g. environmental factors, stressful tasks or caregiver reactions
- decide if the symptoms need to be treated
- formulate a management plan with the caregiver
- implement specific strategies
- review care plans regularly.

General advice for caregivers includes maintaining a calm familiar environment with a regular routine, organising an activity programme that is appropriate for the person with dementia or attending a dementia day care centre. Caregivers need accurate information and support and can seek help from family support groups and counselling centres. It must be noted that treating BPSD can be very difficult and that different strategies may be required for different patients. There is a need to press on with the treatment plans and modify them accordingly.

Non-pharmacological Management

Non-pharmacological interventions are usually first line management for mild to moderate BPSD and it has been shown that environmental and behavioural interventions in conjunction with caregiver education, training and support are effective. Some examples of interventions are listed in Table 3.

Table 3: Examples of Non-pharmacological Interventions

Symptom	Interventions
Agitation and aggression	Calm approach Soft voice Distraction – offer a drink Music Audio or video tapes Hand massage
Wandering	Reassurance Written signs Identity bracelets Access to safe wandering places Digital locks Artificial partitions or visual barriers Electronic alarm systems
Sleeplessness	Activity programme including exercise Sleep hygiene
Behavioural Interventions	Identify a target behaviour Identify the factors surrounding the onset of the behaviours- what happens before, during and after the behaviour Work out a realistic plan to change the factors Review the treatment plans

Pharmacological Management

Medication may be indicated if non-pharmacological interventions have failed or when the symptoms are moderate or severe and has had an adverse impact on the person with dementia or his caregiver. A referral to a psycho-geriatrician may be necessary if the behaviours cannot be controlled.

Guidelines to pharmacotherapy:

- Treat only moderate or severe BPSD with medication
- Use lower doses especially in the elderly
- Target specific behaviours e.g. hallucinations, delusions, aggression
- Start with one drug at a time
- Be aware of adverse effects and drug sensitivity
- Regular reviews of medication effects and side-effects
- Make sure use of medication is time limited.

Table 4. Pharmacological Interventions

Drug	Use	Daily Dose range	Side effects / Comments
Anti-psychotics	Hallucinations Delusions Agitation Aggression	Haloperidol (0.25-2 mg) Risperidone (0.25-2 mg) Olanzapine (2.5-10 mg) Quetiapine (25-150 mg)	Extrapyramidal side effects Over sedation Atypical anti-psychotics associated with possible raised risk of cerebrovascular adverse events and prolongation of Q-T interval
Anti-depressants	Depression	Fluoxetine (20-30 mg) Fluvoxamine (50-150 mg) Escitalopram (10-20 mg) Paroxetine (20-30 mg) Mirtazapine (15-45mg)	Nausea and GIT symptoms Watch out for drug interactions
Cholinesterase inhibitors	Apathy Hallucinations	Donepezil (5-10mg) Rivastigmine (6-12 mg) Galantamine (16-24 mg)	Nausea GIT symptoms
Anti-convulsants	Agitation Aggression	Sodium Valproate (200-1000 mg)	Monitor liver function
Benzodiazepines	Insomnia Anxiety Agitation	Lorazepam (0.5-2 mg)	Excessive sedation Risk of falls

REFERENCES

1. Behavioral and Psychological Symptoms of Dementia (BPSD) Educational Pack, International Psychogeriatic Association, 2002.
2. The 36 hour Day, Nancy Mace and Peter Rabins.

LEARNING POINTS

- **Exclude delirium and psychiatric disorders such as depression as the cause of behavioural problems.**
- **Non-pharmacological management of BPSD with environmental and behavioural interventions, is the first line of treatment.**
- **When using medication for moderate to severe BPSD, choose the appropriate drug, use the lowest dose and regularly review treatment.**