UNIT NO. 2

BEHAVIOURAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA

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ABSTRACT

Behavioural and psychological symptoms of dementia (BPSD) are common in dementia. They cause significant distress to people with dementia and their carers. In managing BPSD, medical causes such as delirium must be excluded. Non pharmacological management, such as environmental and behavioural interventions are effective first line strategies. Medication may be useful in moderate to severe BPSD but must be used carefully in view of the risk of side-effects.

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INTRODUCTION

Dementia is a devastating disease and leads to tremendous suffering for people with dementia and their families. In addition to the cognitive deficits of dementia the behavioural and psychological symptoms of dementia (BPSD) are an integral part of dementia. In the original description of Alzheimer's disease 100 years ago, prominent symptoms of paranoia, screaming and hallucinations were present. BPSD, sometimes referred to as non-cognitive or neuropsychiatric symptoms of dementia, is common and occurs in up to 90% of patients over the course of the disease. It is a significant cause of distress in people with dementia as well as their carers and if untreated can lead to premature institutionalization.

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 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. (See 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 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 recognizing 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 BPSD are 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 to the person with dementia or arrange for the person with dementia to attend a dementia day care centre. Caregivers need support and can seek help from family support groups and counselling centres.

Table 3: Examples of Non-Pharmacological Interventions

Symptom	Interventions
Agitation and aggression	Use a calm approach to the person Speak in a soft voice Distract if possible – offer a drink, talk about a pleasant activity, hand massage Use music or audio or video tapes
Wandering	Reassure when the person appears lost Use large written signs with clear words or symbols If there is a risk that they wander out of the house use identity bracelets with a contact number Allow access to safe wandering places e.g. a garden that is enclosed Use digital locks at exit doors Use artificial partitions or visual barriers to hide exit areas Electronic alarm systems may be useful Handphones with GPS tracking are available
Sleeplessness	Maintain a regular activity and exercise programme Avoid day time naps and caffeine in the evenings Sleep hygiene

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 in the care plan for people with BPSD are listed in Table 3.

Pharmacological management

Medication is indicated if non-pharmacological interventions have failed or when the symptoms are moderate or severe and has an adverse impact on the person with dementia or his caregiver.

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.

REFERENCES

1. Behavioral and Psychological Symptoms of Dementia (BPSD) Educational Pack, International Psychogeriatic Association, 2002
2. Hort J et al. EFNS guidelines for the diagnosis and management of Alzheimer's disease. European Journal of Neurology 2010;17:1236-48.
3. The 36 hour Day, Nancy Mace and Peter Rabins.

Table 4. Pharmacological Interventions

Drug	Use	Daily dose range	Comments
Anti-psychotics	Hallucinations Delusions Agitation Aggression	Haloperidol (0.5-2 mg) Risperidone (0.5-2 mg) Olanzapine (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)	
Cholinesterase inhibitors	Apathy Hallucinations	Donepezil (5-10mg) Rivastigmine (6-12 mg) Galantamine (16-24 mg)	Nausea GIT symptoms
Anti-convulsants	Agitation Aggression	Sodium Valproate (400-1000 mg)	Monitor liver function
Benzodiazepines	Insomnia Anxiety Agitation	Lorazepam (0.5-2 mg)	Excessive sedation Risk of falls

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, use the lowest dose and regularly review treatment.**