

Recognizing and Managing the Complications of Dementia: Behavioral & Psychological Symptoms of Dementia (BPSD)

Kiran Rabheru, MD, CCFP, FRCPC, ABPN
Geriatric Psychiatrist
Associate Professor
University of Ottawa & British Columbia



Objectives

Participants will be able to:

- Identify symptoms and clusters of behavioral disturbances in patients with dementia
- Plan treatment strategies of common behavioral disturbances in various settings: Home, LTC facility, inpatient unit or the ER
- Understand the role of pharmacological management in the treatment planning

What is BPSD?

- Occurs in all types of dementia
- Some types of dementias present with characteristic symptoms
 - e.g. Lewy Body - visual hallucinations
 - Frontotemporal dementia – disinhibition
- BPSD leads to earlier institutionalization, hospitalization, decreased quality of life

“Psychosis” in the elderly is a symptom, NOT a disorder

- Delirium
- Schizophrenia
- Delusional Disorder
- Mood Disorder
- Dementia
- Substance Abuse
- Drug-induced Psychosis
- Medical / Neurological Conditions

Presentation & Diagnosis: Highly variable
Key Principle: Comorbidity

Diagnostic Criteria for Psychosis of Alzheimer's Dementia

- Diagnosis of Alzheimer's disease
- Hallucinations &/or delusions
- Late onset
- Present intermittently for at least 1 month
- Disruptive to patient's functioning
- Associated agitation, negative symptoms and depression
- Exclusion of schizophrenia or other causes of psychotic symptoms
- Disturbances do not correlate exclusively with delirium

Jeste and Finkel. *Am J Geriatr Psychiatry*. 2000;8:29.

Comorbidity is The Rule

DELIRIUM OFTEN PRESENTS WITH PSYCHOTIC / AGGRESSIVE BEHAVIOR

PSYCHOSIS & AGGRESSION

- DELIRIUM
- DEPRESSION
- DEMENTIA
- GENETICS
- PERSONALITY
- PARENTING
- PSYCHO-SOCIAL ENVIRONMENT

Psychosis & Aggression in the Elderly Phases of Treatment

ACUTE → SAFETY → patient, staff, residents

MEDIUM → ASSESS → 1) rule out delirium
2) medicate or not?

LONG-TERM → MAINTENANCE → 1) on what?
2) how long?

DRUGS: NECESSARY BUT NEVER SUFFICIENT ALONE!!

JAMA 2002 Apr 10;287(14):1840-7
 Placebo response in studies of major depression: variable, substantial, and growing.
 Wabnitz BT, Seidman SN, Swack R, Gould M.

Non-Pharmacological Interventions

Approach A kind, unrushed, non-confrontational, face-to-face approach may work better

Schedules Patient-centred care schedules

Demands Reduce demands on patient

Communication Communicate more effectively

Personal Care Meticulous attention to good personal care is essential

Activity and Environment Appropriate daytime activity and environment

Psychotic symptoms in Late Life Prevalence by Setting

Setting	Prevalence	Source
Community	4%	Christensen 1984
Outpatient Clinics	Approximately 20%	Molinari 1983
Long-term care	Up to 50%	Wragg / Jeste 1989

Problems with antipsychotics in LTC

- Began in the 60s & 70s
- Details of behavior not documented properly
- Inadequate assessment before prescribing and nurses lack the training
- Used without properly investigating other non-pharmacologic options.
- Side effects & A/E not recognized
- Families misinformed and over-react
- Psychiatric services unavailable or underutilized...use to justify use of drugs.
- Newer drugs "safer" → false sense of security

<http://www.aqponline.org/journals/news/July2005/ahshart.pdf>

The top 10 most frequent drug events in long-term care by drug type

Use caution when prescribing atypical antipsychotics. They're often administered in error. A nine-month study of two large long-term care facilities found that 11% of adverse drug events involved atypical antipsychotics—second only to warfarin—and 12% of those were deemed preventable.

Drug class	% of total (n=815)	% preventable (n=238)
Warfarin	15%	12%
Atypical antipsychotic agents	11%	12%
Loop diuretics	8%	10%
Opioids	6%	8%
Antiplatelets	6%	7%
ACE inhibitors	6%	8%
Antidepressants (non-SSRI, nontricyclic)	5%	7%
Laxatives	5%	5%
Benzodiazepines (intermediate-acting)	5%	9%
Insulins	5%	5%

Source: American Journal of Medicine, March 2005.

<http://www.bbc.co.uk/1/health/0506215.stm>

Expert warning on dementia drugs

Experts have ruled drugs used to treat schizophrenia should not be given to elderly patients with dementia.

The antipsychotic drugs risperidone and olanzapine are used to control behavioural problems.

But the Committee on Safety of Medicines said patients with dementia were three times more likely to have a stroke if they were taking the drugs.

The CSM estimated that around 40,000 over-65s were prescribed the drugs last year.

Around 30,000 were given risperidone, and 9,000 olanzapine.

Both drugs are atypical antipsychotics, which are also used to treat agitation, anxiety, mania and aggression.

Some doctors prescribed the drugs for patients with dementia, even though they were not specifically licensed for that use, if they believed they could help the individual patient.

66% People with dementia are less frequently given powerful antipsychotic drugs

http://www.yourlawyer.com/practice/news.htm?story_id=77988&topic=risperidol

Parker & Waichman Files Claims Against Eli Lilly and Company on Behalf of Three Individuals Claiming Injuries Caused by Zyprexa; Plaintiffs Diagnosed with Serious Cases of Diabetes and Pancreatitis

Additional Claims vs. Eli Lilly & Co. Expected to be Filed 2/26/2006

03/19/04 - Parker & Waichman LLP (www.yourlawyer.com) filed claims against Eli Lilly and Company (NYSE: LLY - News) on behalf of three individuals who claim to have sustained severe side-effects from Zyprexa. The claims were filed in Federal District Court in the Eastern District of New York. Two plaintiffs have been diagnosed with serious cases of diabetes, and another plaintiff has required lengthy intensive care hospitalization due to a diagnosis of acute pancreatitis. Zyprexa is currently the most popular atypical antipsychotic medication, and is Eli Lilly and Company's best-selling pharmaceutical. Zyprexa users can visit www.zyprexa-side-effects.com for more information on these claims.

The British Medical Control Agency and the Japanese Health and Welfare Ministry have both warned about the risk of diabetes in patients who are prescribed Zyprexa. In 2002, a study at Duke University showed a connection between Zyprexa and diabetes. This study documented nearly 200 cases of diabetes in people using Zyprexa. Only recently has Eli Lilly and Company added some language to their labeling in the United States concerning the risk of diabetes from Zyprexa.

http://www.yourlawyer.com/practice/news.htm?story_id=95928&topic=risperidol

FDA Calls for Warning on Antipsychotic Drugs

04/11/05 - The U.S. Food and Drug Administration ordered new warnings on antipsychotic drugs, alerting physicians to a higher death rate when the medicines are prescribed for atypical use of treating dementia in elderly patients.

The black box warning affects Eli Lilly and Co.'s Zyprexa and Symbrynax, AstraZeneca Pharmaceuticals LP's Serenolol, Johnson & Johnson's Risperdal, Novartis AG's Olanzapine, Pfizer Inc.'s Geodon, and Bristol-Myers Squibb Co.'s and Otsuka America Pharmaceutical's Abilify.

The FDA said it is asking the companies to add the boxed warning to their labels describing the heightened risk and noting the drugs are not approved to treat symptoms of dementia in the elderly.

The FDA said after reviewing 17 studies of four drugs in the class, the death rate for elderly patients on the medication were 1.6 to 1.7 times greater than those on a placebo. Most of the deaths were either heart related or from infections, the FDA said.

Because the FDA believes it is a class effect, it is ordering the warnings on all drugs in the category, it said.

Eli Lilly spokeswoman Carole Copeland said the Zyprexa label

<http://www.parkerwaichman.com/press-releases/2005/05/050501.htm>

Dementia Drugs May Be Risky

May 08, 2005 Parker Waichman Alonso LLP

We have long been writing about the serious side effects associated with some popular dementia drugs. Now, ScienceDaily is reporting that these adverse effects could be placing the elderly at risk, citing Sidney Gill, a participant professor at Queen's University who is also an Ontario Minister of Health and Long Term Care Career Scientist working at Providence Care's St. Mary's of the Lake Hospital in Kingston.

Aricept, Exelon, and Reminyl are a class of drugs called cholinesterase inhibitors and are typically prescribed for Alzheimer's disease patients and patients with related dementia, said Science Daily, explaining that the drugs increase the brain's amount of acetylcholine to aid in memory. The drugs also cause to decrease heart rate and increase

<http://www.parkerwaichman.com/press-releases/2005/05/050501.htm>

Aricept, Zantac, Detrol, other Anticholinergic Drugs Lined to Mental Impairment in Elderly

May 6, 2005 Parker Waichman Alonso LLP

Two separate reports written by researchers at Wake Forest University School of Medicine support findings released recently concerning anticholinergic medications like Aricept, Zantac and Detrol. The studies found that anticholinergic drugs may be adversely affecting the thinking skills of older patients, a phenomenon not observed in those patients studied who do not take these medications. The studies also indicate that anticholinergics may cause older patients to experience a decrease in their daily physical activities.

Use of Antipsychotics in Elderly Dementia Patients:
Benefits out-weighed by adverse events

Cochrane Review

Randomized, double-blind, placebo-controlled trial
Atypical antipsychotics

Observational Study with 37,241 subjects
Conventional vs Atypical

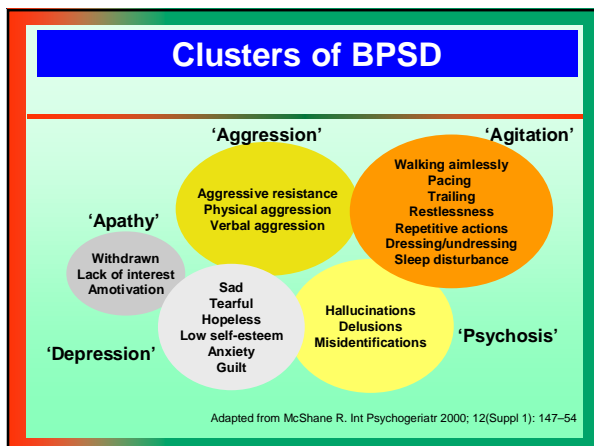
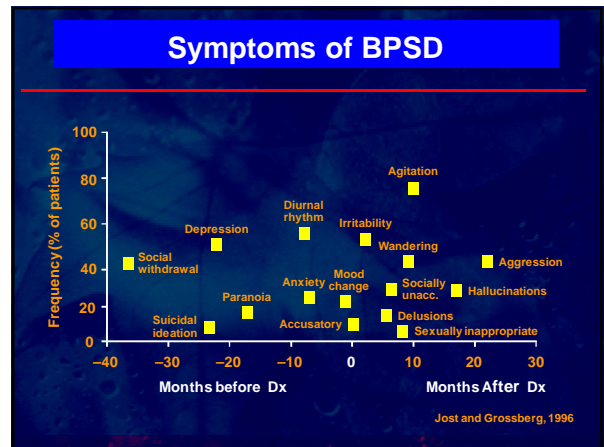
Health Canada

Drugs for BPSD

- If drugs are bad.....
- Why do we still use them?
- If we have to use them, how do we use them safely?
- Goal is to:
 - Maximize benefit
 - Minimize risk
 - Explain these to patient & family
 - Consent

CONCEPT:

1. SYMPTOMS
2. CLUSTERS OF SYMPTOMS



Measurement of vital signs

Identifying & Measuring BPSD

"Behavioural Vital Signs" or "BVS" Tool

Target BPSD Symptoms & Clusters



- Frequency
- Severity
- Impact

BVS Tool: www.cagp.ca

- Click: "LINKS"
- Click: "ASSESSMENT TOOLS"
- Click: "BVS TOOL"

"Behavioral Vital Signs" Tool

BEHAVIOURAL VITAL SIGNS (BVS)

1. The primary caregiver or treatment team is to refer to each target symptom listed below.
 2. Then estimate overall severity, frequency and impact and record these findings.
 3. Can be done per shift, daily, weekly or monthly as ordered.

*Revised by: Dr. Heather MacDonald, CCPC, FRCPC
 Dore, Division of Geriatric Psychiatry
 University of Western Ontario
 London, Ontario*

Delirium	Mood	Depressive-Anxiety	Manic-States	Sleep-Wake Cycle-Disruptions
Fluctuating level of consciousness Attention deficit Disorientation Hallucinations or delusions Other Impulsivity Agitation	Major Depressive Disorder Minor Depressive Disorder Bipolar Disorder Manic-Depressive Disorder Other	Major Depressive Disorder Minor Depressive Disorder Bipolar Disorder Manic-Depressive Disorder Other	Manic-Depressive Disorder Bipolar Disorder Manic-Depressive Disorder Bipolar Disorder Other	Insomnia Excessive daytime sleepiness Irregular sleep-wake cycle Other
Agitation-Physical/Aggressive	Agitation-Verbal/Aggressive	Agitation-Physical/Non-Aggressive	Agitation-Verbal/Non-Aggressive	Apathy
Restlessness Pacing Stereotyped or repetitive movements Verbal or physical aggression Other	Harassment Verbal aggression Other	Social withdrawal Verbal aggression Other	Aggression Verbal aggression Other	Lack of interest Lack of energy Other

Definition of Agitation

- Some patients have symptoms that do not neatly fit into the best-defined symptom complexes of BPSD (e.g. psychosis, depression or anxiety).
- These symptoms are assigned to the "grab-bag" category of agitation.
- Agitation can be defined as inappropriate verbal, vocal or motor activity that is not judged by an outside observer to result directly from the needs or confusion of the person.

Behaviour-Frequency (Rate 1-5)	Severity (Rate 1-5) How much difficulty to help distract or redirect the patient?	Potential Harm to Self/Others (Rate 1-5)
5 Constant	5 Extreme (not redirectable)	5 Extreme (serious harm)
4 Several times a day	4 Intense (major problem)	4 Intense (significant harm)
3 At least once daily	3 Moderate (moderate problem)	3 Moderate (moderate harm)
2 At least once a week	2 Minimal (minor problem)	2 Minor (minor harm)
1 Less than once a week	1 Negligible (insignificant problem)	1 Negligible (no notable harm)
0 Almost never	0 None	0 None

Please place appropriate "X" or — symbols in chart below according to your assessment based on the above criteria.

Behaviour Rating Score (Behaviour Frequency x Severity x Potential Harm)	Time Frame															
	1	2	3	4	5	6	7	8	9	10	11	12				
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

Choose Time Frame by Rate: 1-5 Shift Day Week Month

Approach to BPSD:

The SMART Approach:

- **Safety:** remove patient to safe environment
- **Medical:** organic workup to treat reversible causes; reduce medication load
- **Assess Competency:** personal care decisions, financial, driving; protect assets
- **Rest, nutrition, hydration;** pain ambulation, vision, hearing, constipation
- **Trial of medication:** cholinesterase inhibitor / antipsychotic / antidepressant/ mood stabilizer