

**Session #: W36**  
**Management of the Behavioral and Psychological Symptoms of Dementia (BPSD)**

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- Objectives:**
- ~ Discuss prescribing principles for appropriate use of antipsychotic medications in the elderly.
  - ~ Describe the role of the consultant pharmacist in reducing the use of antipsychotic drugs
  - ~ Describe the clinical and regulatory imperatives to reduce antipsychotic drug use and improve dementia care in skilled nursing homes
  - ~ Explain the four symptom clusters and two symptoms of each in patients with BPSD
  - ~ List two non-drug and two drug treatments considered effective to manage BPSD
  - ~ Explain the role of the multi-disciplinary team to improve dementia care in skilled nursing homes

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**What is BPSD?**

- ~ BPSD is described as a range of psychological reactions, psychiatric symptoms, and behaviors occurring in people with dementia
- ~ Prevalence of BPSD is up to 80% in skilled nursing homes residents
- ~ Unlike cognitive symptoms of dementia that tend to worsen over time, BPSD tend to fluctuate over time.

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**What is BPSD?**

- Symptom clusters include:
- ~ Mood disorders Cluster (depression, anxiety, apathy/indifference, sleep disturbance)
  - ~ Psychotic Cluster (delusions, hallucinations)
  - ~ Aberrant Motor Behaviors Cluster (pacing, wandering, purposeless ? behaviors)
  - ~ Inappropriate Behavior Cluster (agitation, disinhibition, euphoria)

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**The Clinical Imperative  
Evidence-Based Medicine**

- Handouts**
- ~ Algorithm for Treating BPSD  
(Source: North Dakota QIO)
  - ~ Management of Psychotic Disorders and Neuropsychiatric Symptoms of Dementia in Older Adults (AGS 2011)

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### Non-Drug Treatment of BPSD

Some evidence of effectiveness for

- ~ Psychoeducation to change caregiver behavior
- ~ Training to improve staff communication skills and improve knowledge of dementia

May be effective

- ~ Behavior therapy
- ~ Cognitive stimulation therapy
- ~ Multisensory stimulation (Snoezelin, music)
- ~ Therapeutic activities

*Not consistently effective: Specialized dementia units*

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### Antipsychotic Drugs for BPSD

Approved Indications for Antipsychotic Drugs

- ~ Antipsychotics are indicated for the management of psychosis (including delusions or hallucinations, as well as disordered thought), in patients with schizophrenia and bipolar disorder.
- ~ Other appropriate indications may include symptom management in patients with cancer and chemotherapy including hiccups, nausea and vomiting, psychosis due to neoplastic disease, mania due to high-dose steroids, Tourette's Disorder or Huntington disease.
- ~ Behavioral and Psychological Symptoms of Dementia?

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### Antipsychotic Drugs for BPSD

- ~ Best, but modest, efficacy for risperidone and olanzapine
- ~ CATIE-AD trial showed significant adverse side effects for atypical antipsychotics and effectiveness no better than placebo
- ~ Older age, male gender, severe dementia, and functional impairment associated with higher risk of death with AP drugs during first 30 days and possibly up to 2 years of treatment
- ~ Treatment should be limited to 12 weeks

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### Conventional Antipsychotics

- ~ Chlorpromazine (generic only)
- ~ Fluphenazine (generic only)
- ~ Haldol (haloperidol)
- ~ Loxitane (loxapine)
- ~ Moban (molindone)
- ~ Navane (thiothixene)
- ~ Perphenazine (generic only)
- ~ Thioridazine (generic only)
- ~ Trifluoperazine (generic only)

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### Atypical Antipsychotics

- ~ Abilify (aripiprazole)
- ~ Clozaril (clozapine)
- ~ Fanapt (iloperidone)
- ~ Geodon (ziprasidone)
- ~ Invega (paliperidone)
- ~ Risperdal (risperidone)
- ~ Seroquel (quetiapine)
- ~ Zyprexa (olanzapine)
- ~ Symbyax (fluoxetine and olanzapine)

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### Antipsychotic Adverse Effects

- ~ Anticholinergic effects (dry mouth, constipation, blurred vision, drowsiness, dizziness, increased heart rate, urinary retention, delirium)
- Increase in total cholesterol and triglycerides
- Akathisia (inability to sit still, motor restlessness)
- Parkinsonism (tremors, rigidity of movement, shuffling gait, droopy posture or masklike facies)
- Neuroleptic malignant syndrome (hyperthermia with extrapyramidal and autonomic disturbances that may result in death)
- Blood sugar elevation
- Orthostatic hypotension
- Falls, Weight Change, Lethargy/sedation
- Tardive dyskinesia (abnormal involuntary movements of the tongue, lips, face, trunk and extremities)

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**Drug Therapy for BPSD**

Antidepressants

- ~ Some efficacy for citalopram, but drop out rates in one trial approached 50%
- ~ Some efficacy for other SSRIs and trazodone with better tolerability

Benzodiazepines (lorazepam, alprazolam)

- ~ Some benefit seen with IM lorazepam for acute agitation, but significant side effects

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**Drug Therapy for BPSD**

Mood Stabilizers

- ~ Divalproex sodium (Depakote) not effective to treat agitation in dementia with high rates of side effects (sedation, GI symptoms, UTIs, falls)

Cognitive enhancers

- ~ No efficacy for Aricept, Exelon, etc.
- ~ Memantine (Namenda) modest benefit for BPSD in one trial and no benefit in another trial of patients with moderate to severe dementia

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**The Clinical Imperative:  
Evidence-Based Medicine**

**Antipsychotic FDA black box warning:**

FDA ALERT [6/16/2008]: FDA is notifying healthcare professionals that both conventional and atypical antipsychotics are associated with an increased risk of mortality in elderly patients treated for dementia-related psychosis.

In April 2005, FDA notified healthcare professionals that patients with dementia-related psychosis treated with atypical antipsychotic drugs are at an increased risk of death. Since issuing that notification, FDA has reviewed additional information that indicates the risk is also associated with conventional antipsychotics.

**Antipsychotics are not indicated for the treatment of dementia-related psychosis.**

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**Causes of "Abnormal" Behavior in Dementia**

- ~ CV disease
- ~ COPD
- ~ Brain tumors
- ~ Infection
- ~ Depression
- ~ Anemia
- ~ Metabolic Disorders
- ~ **Untreated or undertreated pain (#1 cause)**

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**Causes of Pain in Dementia Patients**

- ~ Arthritis
- ~ Old fractures/unrecognized fractures
- ~ Neuropathy
- ~ Malignancy
- ~ Fecal impaction
- ~ Urinary retention
- ~ Surgical abdomen

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**Analgesics in Dementia**

- Preferred Agents %Bortmanteau+
- ~ Acetaminophen
  - ~ Gabapentin/pregabalin
  - ~ Duloextine
  - ~ Tramadol
  - ~ Fentanyl
  - ~ Hydromorphone
  - ~ Methadone?

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**Analgesics in Dementia**

Use with Caution

- ~ Morphine
- ~ Oxycodone
- ~ Tapentadol

Avoid

- ~ TCAs
- ~ Codeine
- ~ Demerol
- ~ Benzodiazepines/muscle relaxants

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**Pain and BPSD**

- ~ 35 million worldwide with dementia expected to increase to 115 million by 2050
- ~ Agitation and aggression are common especially in mod-severe dementia in SNFs
- ~ Incidence of pain in SNF residents ranges from 50-80%

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**Efficacy of Treating Pain to Reduce BPSD**

- ~ Study conducted in 60 nursing homes in Norway from Oct. 2009 to June 2010
- ~ First adequately powered parallel group randomized controlled trial of pain management for the treatment of agitation in persons with mod-severe dementia
- ~ Eight week trial with 12 week follow-up
- ~ Stepwise treatment protocol in the intervention group followed AGS guidelines

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**Efficacy of Treating Pain to Reduce BPSD**

- ~ Patients randomized to acetaminophen up to 3gm/day (68%), morphine up to 20mg/day (2%), Butrans patch up to 10mcg/hr (23%), pregabalin up to 300mg/day (7%)
- ~ Reduction in the Cohen-Mansfield agitation inventory showed a 17% advantage for Tx group
- ~ Positive response supported by worsening of agitation over 4 weeks after treatment was stopped
- ~ Compares to 3%, 13%, and 18% advantage in Cohen-Mansfield agitation inventory in 3 trials of risperidone

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**The Regulatory Imperative: F329: Unnecessary Drugs**

- ~ Each residents drug regimen must be free from unnecessary drugs. An unnecessary drug is any drug when used:
  - . In excessive dose (including duplicate drug therapy); or
  - . For excessive duration; or
  - . Without adequate monitoring; or
  - . Without adequate indications for its use; or
  - . In the presence of adverse consequences which indicate the dose should be reduced or discontinued; or
  - . Any combination of the reasons above.

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**The Regulatory Imperative: F329: Antipsychotic Drug Use**

- ~ Based on a comprehensive assessment of resident, the facility must ensure that
  - . Residents who have not used antipsychotic drugs are not given these drugs unless antipsychotic drug therapy is necessary to treat a specific condition as diagnosed and documented in the clinical record; and
  - . Residents who use antipsychotic drugs receive gradual dose reductions, and behavioral interventions, unless clinically contraindicated, in an effort to discontinue these drugs.

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**The Regulatory Imperative:  
Office of Inspector General (OIG)**

- ~ Elderly nursing facility residents receiving atypical antipsychotic drugs (see below) are a particularly vulnerable population because of an increased risk of death associated with these drugs.
- ~ A previous OIG study found that when this population received these drugs, about half of the drugs were not given for medically accepted indications as required for Medicare coverage and one-fifth of the drugs were not given in accordance with federal safeguards to protect nursing facility residents from unnecessary antipsychotic drug use (OIG Report July 2012).

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**Regulatory Imperative: CMS National Partnership to Improve Dementia Care**

Launched by CMS March 29, 2012

- ~ Public Reporting (15% reduction in the use of AP drugs by 12/12 – achieved in 2013)
- ~ Partnerships and State-Based Coalitions (QIOs, consumer groups, ombudsman)
- ~ Research (how IDT makes decisions to use AP drugs in residents with dementia)
- ~ Training (Hand in Hand training series for direct care workers)

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**New Quality Measures for Antipsychotic Drug Use in SNFs**

- ~ In July 2012, CMS posted new quality measures (QM) for antipsychotic drug use in both short-stay (<100 days) and long-stay (>100 days) residents. These measures are described below
- ~ Short-Stay Antipsychotic Drug QM
  - . # of residents started on an antipsychotic drug after admission/# of residents in the facility
- ~ Long-Stay Antipsychotic Drug QM
  - . # of residents on an antipsychotic drug without a diagnosis of Schizophrenia, Tourette's Syndrome, or Huntington's Disease/# of residents in the facility
- ~ These QMs are derived from the an average of the last three MDS 3.0 submissions and updated quarterly.

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**Antipsychotic Reduction in Nursing Homes  
A CMS Imperative**

**Fundamental principles of dementia care include:**

- ~ Person –centered care
- ~ Quality and Quantity of Staff
- ~ Thorough evaluation of new or worsening behavioral symptoms
- ~ Non-pharmacological interventions
- ~ Critical thinking and investigative questions related to antipsychotic drug use.
- ~ Engagement of resident and/or representative in decision-making

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**Behavior and Psychotropic  
Management Resource**

- ~ Golden Living has established a goal in conjunction with the American Health Care Association; and CMS to reduce the use of antipsychotic drugs in residents with dementia without serious mental illness (schizophrenia, bipolar, Huntington's, or Tourette's). We recognize that no antipsychotic medication is without risk of negative side effects and our purpose is to minimize these risks.
- ~ One of the key elements identified is a behavior management team led by a champion to assure appropriate use of these drugs. A team will focus on the process for evaluating the need for antipsychotic drug use at treatment initiation (new order or upon admission) and at the Care Management meeting.

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**Behavior Management Committee**

**Review Process:**

- ~ The focus of the Behavior Management Committee is to conduct an interdisciplinary review, analysis and if warranted, revision or creations of a behavior management plan both behavioral and pharmacological.

**Questions To Consider:**

- ~ What behavior(s) is the resident currently exhibiting (description, frequency)?
- ~ What may be the "triggers" for the behavior(s)?
- ~ What interventions prevent the behavior(s) from escalating or occurring?
- ~ What historical interventions have been attempted (pharmacological, behavioral) and what were the results?
- ~ Based on the Committee's analysis and recommendations nursing staff will incorporate the behavior management plan into the Interdisciplinary Plan of Care.
- ~ The Committee's Social Service Director will summarize the Behavior Management Plan for each resident in the Social Service progress note.

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### Behavior Management Committee

#### Assessment/Care Planning

- ~ Antipsychotic drug use is evaluated by the prescriber and the behavior management team within 7 days drug initiation or admission with drug order. Gradual dose reduction or drug discontinuation is ordered unless a clinical contraindication is documented in the medical record
- ~ Licensed staff review hospitalization or admission records for those exhibiting behaviors or utilizing antipsychotic medications
- ~ Licensed nursing staff completes the Clinical Health Status within 24 hours of admission.
- ~ Licensed nursing staff completes the Plan of Care following identification of antipsychotic medication usage or behavioral concerns.
- ~ Licensed nursing staff refer to Behavior Tip Sheets as indicated to help with interventions for current residents who exhibit new behaviors.

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### Behavior Management Committee

- ~ The Antecedent Behavior Monitoring Log is utilized for new residents with behaviors and current residents who exhibit new behaviors that negatively impact functioning or quality of life.
  - The log is reviewed by the Behavior Committee members to identify patterns and causative or triggering events for the behavior(s) and effectiveness of interventions.
  - Observe resident and review for reversible cause (possible underlying medical conditions/symptoms and medications that may be causing the behavior i.e.; UTI, rash/allergic reaction, pain.)
  - Non-pharmacological interventions and implemented and assessed for effectiveness, PRIOR to considering initiation of any psychoactive medications.
- ~ Based on a review of the tracking log, a determination will be made if the resident is a danger to self or others and if so, a plan of care is developed to ensure safety and determine if the center can meet the resident/patient's needs on an ongoing basis.

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### Behavior Tip Sheets

- ~ Hoarding
- ~ Manipulative Behavior
- ~ Physical Aggression
- ~ Resident Yelling and Swearing
- ~ Sleep Problems
- ~ Unjustified Complaining
- ~ Unsafe Movements
- ~ Verbal Aggression
- ~ Wandering

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**Appropriate Antipsychotic Drug Use  
Role of the Consultant Pharmacist**

- ~ Fully integrated member of the IDT
- ~ Active participant in weekly risk reduction meetings including behavior management
- ~ Provide prescribers, direct care staff, management, patients, and families with education about appropriate medication use
- ~ Provide medication consults for short-stay residents and change of condition

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**Appropriate Antipsychotic Drug Use  
Role of the Consultant Pharmacist**

**Golden Living Kirtland Ohio Successes**

- . November 2012 to October 2014– Residents on AP drugs reduced from 38% to 17.3% (93rd to 55<sup>th</sup> percentile – Point Right Data)
- . Consultant pharmacist brings request to the IDT each week for GDR or DC of AP drugs for 5-10 residents
- . Team reviews and agrees or disagrees with difficult cases sent to geropsych MD for input
- . Multiple in-services presented to CNAs on Changing Behavior and to licensed nursing staff on the Management of BPSD to promote culture change

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**Review Questions**

1. T or F: The prevalence of BPSD in SNF patients is 40%
2. T or F: Disinhibition is a symptom of BPSD included in the Mood Disorder Cluster
3. T or F: BPSD can be effectively managed by placing the patient in a locked dementia care unit.
4. List three behaviors commonly found in patients with BPSD

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## References

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- A guide to the management of psychotic disorders and neuropsychiatric symptoms of dementia in older adults April 2011 American Geriatric Society
- Husebo, BS, Ballard, C et al Efficacy of treating pain to reduce behavioural disturbances in residents of nursing homes with dementia: cluster randomized clinical trial BMJ 2011;343:d4065 doi:1136/bmj.d4065

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# Algorithm for Treating Behavioral and Psychological Symptoms of Dementia (aka Problem Behaviors)

## STEP 1: IDENTIFY, ASSESS, AND TREAT CONTRIBUTING FACTORS<sup>a</sup>

- Determine and document frequency, duration, intensity, and characteristics of **each** problem behavior
- Identify, assess, treat or eliminate **ANTECEDENTS** and **TRIGGERS**<sup>b</sup>

### Unmet physical needs?

- Pain
- Infection/illness
- Dehydration/nutrition
- Sleep disturbance
- Medication side-effects
- Sensory deficits
- Constipation
- Incontinence/retention

### Unmet psychological needs?

- Loneliness
- Boredom
- Apprehension, worry, fear
- Emotional discomfort
- Lack of enjoyable activities
- Lack of socialization
- Loss of intimacy

### Environmental causes?

- Level/type of stimulation: noise, confusion, lighting
- Caregiver approaches
- Institutional routines, expectations
- Lack of cues, prompts to function & way-find

### Psychiatric causes?

- Depression
- Anxiety
- Delirium
- Psychosis
- Other mental illness

### Monitor outcomes to assure full treatment response

- *If problem behavior persists after antecedents are adequately treated, use **NON-DRUG INTERVENTIONS***

## STEP 2: SELECT AND APPLY NON-PHARMACOLOGICAL INTERVENTIONS

- Select interventions based on the TYPE of problem and ASSESSMENT of retained abilities, preferences, and resources
  - ✓ Cognitive level
  - ✓ Physical function level
  - ✓ Long-standing personality, life history, interests/abilities
  - ✓ Preferred personal routines and daily schedule
  - ✓ Personal/family/facility resources
- Train staff to use selected interventions appropriately/following best practice and evidence guidelines
- Tailor intervention to individualized needs, combining approaches and interventions to promote comfort & function
- Monitor outcomes using rating scales to quantify behaviors

### Adjust caregiver approaches

- **Personal approach:** cue, prompt, remind, distract (treats, activities); focus on person's wishes, interests, concerns; use/avoid touch as indicated; avoid trying to reason, teach new routines, or ask to "try harder"
- **Daily routines:** simplify, sequence tasks; offer limited choices; use long-standing history & preferences to guide
- **Communication style:** simple words and phrases; speak clearly; wait for answers; make eye contact; monitor tone of voice/other nonverbal messages
- **Unconditional positive regard:** do not confront, challenge or "explain" misbeliefs (hallucinations, delusions, illusions); accept belief as "real" to the person; reassure, comfort, and distract
- **Involvement/engagement:** tailor activities to increase involvement/reduce boredom; individualize social and leisure activities

### Change the environment

- **Eliminate misleading stimuli:** clutter, TV, radio, noise, people talking; reflections in mirrors/dark windows; misunderstood pictures/decor
- **Reduce environmental stress:** caffeine; extra people; holiday decorations; public TV
- **Adjust stimulation:** reduce noise, activity, confusion if over-stimulated; increase activity/involvement if under-stimulated (bored)
- **Enhance function:** signs, cues, pictures to promote way-finding; increase lighting to reduce misinterpretation
- **Involve in meaningful activities:** personalized program of 1:1 and small group vs. large group
- **Adapt the physical setting:** secure outdoor areas; decorative tactile objects; homelike features; smaller, segmented recreational and dining areas; natural and bright light; spa-like bathing facilities; signage to promote way-finding

### Use Evidence-Based Interventions<sup>c</sup>

- **Agitated/Irritable:** Calm, soothe, distract
  - ✓ Individualized music
  - ✓ Aromatherapy (e.g., lavender oil)
  - ✓ Simple Pleasures (see website)
  - ✓ Pet therapy
  - ✓ Physical exercise/outdoor activities
- **Resistant to Care:** Identify source of threat; change routines and approaches
- **Wandering/Restless/Bored:** Engage, distract
  - ✓ "Rest stations" in pacing path
  - ✓ Adapt environment to reduce exit-seeking
  - ✓ Physical exercise/outdoor activities
  - ✓ Simple Pleasures
- **Disruptive Vocalization:** Distract, engage
  - ✓ Individualized music; Nature sounds
  - ✓ Presence therapy: tapes of family
- **Apathetic/Withdrawn:** Stimulate, engage
  - ✓ Individualized music
  - ✓ Simple Pleasures
- **Repetitive Questions/Mannerisms:** Reassure, address underlying issue, distract
  - ✓ Validation therapy/therapeutic lying
  - ✓ Simple Pleasures
- **Depression/Anxiety:** Reassure, engage
  - ✓ Physical exercise
  - ✓ Pleasant activities
  - ✓ Cognitive stimulation therapy
  - ✓ Wheelchair biking

## STEP 3: MONITOR OUTCOMES AND ADJUST COURSE AS NEEDED

- Quantify behavioral symptoms using rating scale(s)
- Assure adequate "dose" (intensity, duration, frequency) of interventions
- Provide/reinforce staff training and development activities to assure full understanding and cooperation in daily care
- Adapt/add interventions as needed to promote optimal outcomes
- Consider antipsychotics for persistent and severe cases that meet criteria for use. See *Antipsychotic Prescribing Guide*.

### Footnotes:

- Diverse symptoms must be assessed and treated individually to assure optimal outcomes.
- Causal and contributing factors must be fully assessed and treated before psychotropic medications are used. Ongoing monitoring of these factors is essential to high quality care. Antecedents or triggers are things that happen before a problem behavior. These may be causal or contributing factors.
- Use of evidence-based interventions requires full understanding of the protocols and appropriate application to assure optimal outcomes.

## **Management of Psychotic Disorders and Neuropsychiatric Symptoms of Dementia in Older Adults**

### Key Points

- Psychotic symptoms include hallucinations or delusions
  - Hallucinations are perceptions without stimuli
  - Delusions are fixed, idiosyncratic, or false perceptions or beliefs with little if any basis in reality and are not the result of religious or cultural norms. Delusions can be suspicious (paranoid) grandiose, somatic, self-blaming, or hopeless
- Psychotic symptoms are often mood-congruent: i.e. in depression, delusions that one is poor or dead; in mania, grandiose delusions, elevated self-regard

### Differential Diagnosis of Psychotic Disorders in Older Adults

- Bipolar affective disorder
- Delirium, including visual hallucinations
  - Acute onset
  - Identifiable metabolic, pharmacologic, or infectious cause
  - Multiple cognitive impairments and a diminished or waxing and waning level of consciousness
- Dementia
  - Frontotemporal dementia includes socially inappropriate, objectionable, and odd behaviors
  - Lewy body dementia presents with visual hallucinations, autonomic instability, parkinsonism, and frequent falls
- Medications: antiparkinsonian agents, anticholinergics, benzodiazepines, alcohol (including withdrawal), stimulants, corticosteroids, cardiac drugs (i.e. digitalis), opioid analgesics
- Late-life delusional (paranoid) disorder
- Major depression: delusions of self-deprecation, self-blame, hopelessness, ill health
- Physical disorders:
  - Untreated or undertreated pain
  - Schizophrenia
  - Structural brain lesions: tumor or stroke
  - Seizure disorder, i.e. temporal lobe

### Risk Factors for Psychotic Symptoms in Older Adults

- Chronic bed rest
- Cognitive impairment
- Female gender
- Sensory impairment
- Social isolation

### Common Neuropsychiatric Symptoms Associated with Dementia

- Psychotic Symptoms (delusions, hallucinations)
  - Seen in 20% of Alzheimer's (AD) patients
  - Delusions may be paranoid
  - Hallucinations (11% of patients) more commonly visual
- Depressive Symptoms
  - Seen in up to 40% of Alzheimer's patients, may precede onset of AD
  - Signs include sadness, loss of interest in usual activities, anxiety, irritability
  - Suspect if patient stops eating or withdraws
- Apathy
  - High prevalence and persistence throughout the course of AD
  - Causes more ADL impairment than expected for cognitive decline

- Manic-like Behavioral Symptoms
  - Signs include pressured speech, disinhibition, elevated or irritable mood, intrusiveness, hyperactivity, impulsivity, reduced sleep
- Agitation of Aggression
  - Seen in up to 80% of AD patients
  - A leading cause of nursing home admission
  - Always identify and examine context of behavior (harmful to self or others) and environmental triggers (overstimulation, unfamiliar surroundings, frustrating interactions)
  - Determine whether delusions or hallucinations are interfering with function
  - Exclude physical discomfort (i.e. pain, hunger)

### Management of Neuropsychiatric Symptoms Associated with Dementia

- Always consider and document outcomes of nonpharmacologic strategies first
  - Scheduled toileting and prompted toileting for incontinence
  - Graded assistance for ADLs, role modeling, cueing, positive reinforcement to increase independence (decrease dependence)
  - Avoid confrontation, try redirection instead
  - Maintain a calm demeanor
  - Use services of caregiver support groups
  - Music during meals and bathing
  - Walking or light exercise
  - Simulate family presence with video or audio tapes
  - Pet therapy
  - Speak at patient's comprehension level
  - Utilize bright light and white noise
  - For intermittent disruptive behaviors, identify and avoid antecedents/triggers of the behavior
- Add drug therapy only if there is an immediate threat to self or others
  - Target drug treatment to specific symptoms (see below)
  - Start with low dose and **increase only if effective and necessary**
  - Reevaluate frequently for effectiveness and side effects of treatment
  - If side effects appear, consider dose reduction or drug discontinuation before adding another drug to treat side effects
  - If symptoms resolve, consider gradual dose reduction at least every 3-6 months with goal of drug discontinuation
  - If symptoms persist, consider alternative treatment and/or consult with specialist

### **Pharmacologic Management of Neuropsychiatric Symptoms Associated with Dementia**

- *See full text of guidelines for specific medications and dosing*

- Psychotic Symptoms (delusions, hallucinations)
  - Low dose second-generation antipsychotic (i.e. risperidone, aripiprazole, quetiapine)
- Depressive Symptoms
  - Antidepressants (i.e. escitalopram, mirtazepine, bupropion)
- Apathy
  - Antidepressants (i.e. escitalopram, mirtazepine, bupropion)
- Manic-like Behavioral Symptoms
  - Mood stabilizers (i.e. divalproex sodium, lamotrigine, carbamazepine)

Source: A guide to the management of psychotic disorders and neuropsychiatric symptoms of dementia in older Adults April 2011 American Geriatric Society