Best Practice Guideline for Accommodating and Managing Behavioural and Psychological Symptoms of Dementia in Residential Care

A Person-Centered Interdisciplinary Approach

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Introduction

The *Best Practice Guideline for Accommodating and Managing Behavioural and Psychological Symptoms of Dementia in Residential Care* (the guideline) was developed in response to "A Review of the use of Antipsychotic Drugs in British Columbia's Residential Care Facilities" conducted by the Ministry of Health in 2011. Integral to the guideline is a two-part algorithm developed by Interior Health Authority's Antipsychotic Drug Review Committee (IHA) called the *Algorithm for Accommodating and Managing BPSD in Residential Care* (the algorithm). The algorithm is a practical, electronic decision support tool designed to support clinical assessment and care decisions of persons with behavioural and psychological symptoms of dementia. Applied together, the guideline and algorithm will support physicians, nurses, clinicians and care staff to provide interdisciplinary, evidence-based, person-centred care to those experiencing behavioural and psychological symptoms of dementia (BPSD), with a specific focus on the appropriate use of antipsychotic drugs in the residential care setting.

The guideline and algorithm are rich resources for all involved in the care of persons with dementia. They reflect the important culture of person-centered interdisciplinary care and decision making that involves physicians, nurses, pharmacists, caregivers, family members, care staff and persons in care. The guideline and algorithm were developed based on the Canadian Coalition for Seniors Mental Health document, *National Guidelines for Senior's Mental Health: the Assessment and Treatment of Mental Health Issues in Long-Term Care Homes*[1] and the British Columbia (BC) *Clinical Practice Guideline on Cognitive Impairment in the Elderly: Recognition, Diagnosis and Management* (2007, revised 2008)[2].

The guideline aims to:

- Improve the quality of care for persons with dementia who live in residential care;
- Improve resident/family/substitute decision maker engagement in consent to care and treatment;
- Identify the appropriate use of antipsychotic drugs in treating BPSD in residential care, and
- Increase the capacity of the residential care sector to provide appropriate assessment and care for persons experiencing BPSD.

The guideline and algorithm are additional tools to support quality care in residential care settings and are not meant to replace person-centred care planning, use of the BC *Clinical Practice Guideline on Cognitive Impairment in the Elderly: Recognition, Diagnosis and Management* (2007, revised 2008), or provincial and regional policies that apply to residential care settings.

Health authorities, physicians, clinical experts and care staff in all of British Columbia's health care settings are encouraged to use this guideline and algorithm, as it offers evidence-based tips and tools to deliver best practice, non-pharmacological approaches to person-centred dementia care.

Glossary of Terms

Antipsychotic Medications: Drugs developed to treat psychotic disorders such as schizophrenia, and bipolar disorder/psychotic depression. In older adult psychiatry they have roles in the management of psychotic disorders, mood disorders, delirium, and some behavioural and psychological symptoms of dementia (e.g. psychosis/marked aggression). There are three major classes based on their dopamine/serotonin binding properties: typical, atypical and third generation. They are used to treat psychosis and aggression in dementia based on studies that support judicious use in these areas.[1]

Agitation: A term used to describe excessive motor activity with a feeling of inner tension and characterized by a cluster of related symptoms including anxiety and irritability, motor restlessness and abnormal vocalization, often associated with behaviours such as pacing, wandering, aggression, shouting and night time disturbance.[2]

Aggression: An overt act involving delivery of a noxious stimulus to another person that was clearly not accidental.[3]

Behavioural and Psychological Symptoms of Dementia (BPSD): Refers to symptoms of disturbed perception, thought content, mood or behaviour that frequently occur in patients with dementia.[4]

Best Practice Guidelines: Are systematically developed statements (based on best available evidence) to assist physician, clinician and patient decisions about appropriate health care for specific clinical (practice) circumstances. The main purpose of guidelines is to achieve better health outcomes by improving the practice of health care professionals and providing consumers with better information about treatment options.[5]

Person- Centred Care: This means seeing the person with dementia as a person first and foremost. It is easy to view people with dementia as a collection of symptoms, and think that one person with dementia is much like the next, or to forget that each person with dementia is an individual with unique qualities. Person-centred care means getting to know the person and then thinking how their condition is affecting them.[6]

Consent to Health Care: A voluntary decision made by a capable adult age 19 or over, or their authorized substitute decision maker, in British Columbia to accept or refuse an offer of medically appropriate health care treatment. The conditions for consent to health care are set out in the *Health Care (Consent) and Care Facility (Admission) Act.*

Decision Support Algorithm: An evidence-based document used by health care clinicians to guide the assessment, diagnosis and treatment of client-specific clinical problems. They are typically more prescriptive than best practice guidelines.

Dementia: A chronic, progressive disease of the brain that affects memory, thinking, orientation, comprehension, calculation, learning capacity, language, judgment, and executive function.[7]

Documentation: Any written or electronically generated information about a client that describes the care or service provided to that client.

Substitute Decision Maker: A capable person with authority to make health care treatment decisions on behalf of an incapable adult, and includes a personal guardian (committee of person), representative and/or temporary substitute decision maker (TSDM). A TSDM is chosen by a health care provider using the list in the *Health Care (Consent) and Care Facility (Admission) Act*, in the order given.

[1] Comprehensive Textbook of Geriatric Psychiatry. 3rd Edition, Edited: J. adavoy et al. (2004).
[2] Howard, R. et al. Guidelines to management of Agitation in Dementia. IJGP. (2001).
[3] Patel V., Hope T. Aggressive behaviour in elderly people with dementia: a review. International Journal of Geriatric Psychiatry (1993).
[4] Finkel and Burns. Consensus Group definition. International Psychogeriatric Association. (1999). P.5
[5] NHMRC. A guide to the development, implementation and evaluation of clinical practice guidelines. (1999).
[6] Alzheimer's Society Warwickshire County, U.K. (2001).
[7] Adapted from the *Dementia Service Framework*, Ministry of Health (2007).

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The Best Practice Guideline for Accommodating and Managing BPSD

Introduction and Rationale

The *Best Practice Guideline for Accommodating and Managing Behavioural and Psychological Symptoms of Dementia in Residential Care* was developed in response to the report*, A Review of the Use of Antipsychotic Drugs in British Columbia's Residential Care Facilities (*Ministry of Health, December 2011). The review was conducted in response to public concerns that antipsychotic drugs and similar medications were being over-prescribed for residents with dementia. According to the report, the use of antipsychotic drugs has been increasing in residential care facilities (excluding facilities licensed under the Hospital Act) since 2001/02 from 37 percent to 50.3 percent between April 2010 and June 2011. The review produced a number of recommendations including the need to develop evidence-based interdisciplinary practice guidelines for the appropriate use of antipsychotic drugs for residents in residential care facilities, and ensuring that the family is involved in the decision making process.

The increasing use of antipsychotic drugs in residential care settings is not unique to BC. Many national and international jurisdictions are also addressing this issue as the use of newer atypical antipsychotic drugs (such as risperidone, olanzapine, quetiapine, and others) are used to treat BPSD. Increased usage is primarily in response to the increasing prevalence of persons with dementia in residential care, and the belief that this class of antipsychotics is safer to use with fewer adverse effects than the original typical antipsychotics, such as haloperidol and loxapine. It is now generally accepted that all antipsychotics, whether typical or atypical, are associated with increased morbidity and mortality in persons with dementia and should be used with caution.

National and international guidelines often recommend that the first course of action ought to be implementation of non-pharmacological interventions prior to the initiation of any psychotropic medication therapy. However, there is evidence that indicates antipsychotic medications can be used effectively when there is a significant risk of harm to the patient or others, or when agitation with aggressive symptoms are persistent or recurrent or severe enough to cause significant suffering and distress to the person in care, or may cause significant interference with the delivery of care. [1,2,3]

Prior to the initiation of any psychotropic medication, physicians, nurses and other clinicians should carefully evaluate the risks versus benefits for each resident and obtain informed consent from the resident or their substitute decision maker prior to commencing treatment.

Key Considerations:

- Conduct an assessment to evaluate the person's behavioural symptoms and define specific goals.
- Consider the person's physical, intellectual, emotional, capabilities, environmental, and social factors to understand their behaviours.
- Individualize interventions based on assessment. Use non-pharmacological interventions before turning to pharmacological interventions, and if medications are medically indicated, continue using non-pharmacological, person-centred approaches.
- Select psychological and meaningful social interventions based on individualized goals of care.

- Follow recommended guidelines for prescribing, initiating, titrating and weaning psychotherapeutic drugs for older adults with BPSD.
- Continue to assess whether the goals of treatment are being met using a reliable tool such as the *Pocket Guide Tool on the Assessment & Treatment of Behavioural Symptoms of Older Adults Living in Long Term Care Facilities*. (Canadian Coalition for Seniors Mental Health, 2010).

1. Assessing Behavioural and Psychological Symptoms of Dementia

1.1 What are Behavioural and Psychological Symptoms of Dementia (BPSD)?

Behavioural and psychological symptoms of dementia (BPSD) refers to the non-cognitive symptoms of disturbed perception, thought content, mood or behaviour that frequently occurs in patients with dementia.[4] The etiology of BPSD is multi-factorial, as some behaviours can be a result of neurotransmitter changes from the disease itself, as well as a reflection of challenges with communication and environment. Those symptoms are called neuropsychiatric symptoms.

The spectrum of behavioural and psychological symptoms of dementia (BPSD) may include:

- aggression
- agitation, and/or restlessness
- screaming
- pacing and repetitive motor activity
- anxiety
- depression
- psychosis (delusions and hallucinations)
- repetitive vocalization, cursing and swearing
- sleep disturbance
- shadowing (following the carer closely)
- sundowning
- wandering
- hoarding[5]

Historically, the behaviours associated with dementia were termed as problematic, disturbing, difficult, inappropriate and challenging. This negative terminology characterizes the behaviours from the point of view and experience of the person trying to manage it, without a positive focus on the person. Such terminology is being replaced with the more neutral, person-centred term ‘responsive behaviours’ in recognition that most, but not all, behaviour is a response to a cue or trigger experienced by the person with dementia. Today, behaviours expressed by persons with dementia are being recognized as a form of communication rather than as random, unpredictable or meaningless events that arise from disease. It is helpful to view behaviours as the person’s best attempt to respond to their current situation and communicate their unmet needs.

The evidence indicates that successful management of BPSD requires physicians, nurses, other clinicians and all health care providers to understand the resident’s needs behind the dementia-related

behaviours, rather than attempt to control or extinguish them. This means making adjustments in the understanding of what can influence or trigger behaviours, and implementing approaches to care that are person-centred and tailored to the individual with an emphasis on their remaining abilities and strengths. Equally important to consider is the multi-factorial nature of BPSD, in that not all behaviours are strictly responsive to stimuli but rather some may be related to neurochemical changes in the brain, which can contribute to behavioural presentations along with environmental press.[17]

1.2 Determining Target Behaviours

Responding appropriately and skilfully to persons expressing behavioural and psychological symptoms of dementia is essential to providing quality care. The appropriate interventions and management of these behaviours initially requires an assessment to identify possible causes and triggers that may contribute to these behaviours. It is important to have a baseline reference point, including information from others on admission, to enable comparisons of newly expressed behaviours over time.

Recognizing that all behaviours have meaning and that individuals have patterns of behaviour, it is important for the interdisciplinary team to identify the trigger(s) of the behaviour in order to initiate preventative measures and appropriate interventions. It is essential to try to understand why a particular symptom or behaviour is being experienced by the resident at that particular time. It is useful to consider the behaviour as an expression of the person's unmet needs – a communication that challenges others to understand the resident's experience. Then it becomes possible for residential care staff, family and others close to the resident to assist the resident in meeting their particular needs in a supportive environment.

Practice Tip:
A number of evidence-based standardized assessment tools are available to assist with this assessment such as the Cohen Mansfield Agitation Inventory, Dementia Observation Scale, Behaviour Pattern Record, etc.

It is vital to identify possible medical causes for the behaviour(s) through a comprehensive assessment and review of medical and psychiatric history, and to distinguish dementia from depression or delirium. These three conditions (sometimes referred to as the '3Ds') often co-exist. For example, severe depression can present as a dementia-like illness (pseudo-dementia) while a resident with a delirium may appear confused or disoriented. Underlying causes of a delirium may be due to infections, drug toxicity, alcohol withdrawal and/or metabolic disturbances.[6] Understanding the person's biographical history and current psychological, social and environmental factors is also important. The resident and/or those who know the person well may be able to give additional information about the current concern.

By using the ABC model to understand behaviours in terms of antecedents (A), behaviour (B) and the consequences (C), referred to as 'the ABC Approach', it is possible to effect change in some behaviours by manipulating triggers in the physical or social environment, or altering responses to the behaviour that perpetuate it, rather than using a pharmacological intervention. By identifying the target behaviour and their probable causes, an individualized care plan can be formulated to reduce the incidence of the

behaviours. RAI Clinical Assessment Protocols™ (CAPs)[17] are reliable clinical tools that may be used to support clinical assessment, decision-making and care planning.

2. Non-Pharmacological Interventions for BPSD

A care plan that focuses on non-pharmacological interventions is considered best practice as the first-line management of most behavioural and psychological symptoms of dementia. Often, simple, practical solutions and an awareness of the person's preferences can make a significant difference and help avoid turning to the use of medications to suppress behaviours. In cases where marked distress or imminent and serious risk of harm to self or others indicates that initial treatment needs to include medication, it is generally agreed that non-pharmacological management should still be initiated in parallel.[1] Although research supporting a combined approach is limited, there is some evidence that individualized treatments and approaches that combine pharmacological and non-pharmacological interventions (e.g., providing structure, scheduling events to adjust for a resident's needs, involving relatives in care planning, shifting the agitated resident into an activity they like to produce a calming effect, such as going for a walk or listening to music) can lead to a significant reduction in agitation.[1]

The RAI Clinical Assessment Protocols ™[17] can assist with the development of an individualized plan of care and inform the on-going evaluation of the impact of non-pharmacological interventions. Parallel to the philosophical elements in person-centred care, interdisciplinary care plans should be developed by the health care provider in collaboration with the resident and family or substitute decision maker with goals and outcomes carefully documented, evaluated and adjusted as required. There is evidence that indicates implementing other interventions such as music, individualized behavioural approaches, and changes to the physical environment will improve some behaviours.[1] Verbal and non-verbal communication techniques such as speaking at eye level, approaching from the front and communicating in a clear, empathetic adult tone of voice have also demonstrated effectiveness in preventing and managing some behaviours.[9] Non-pharmacological treatments are frequently termed psychosocial or behavioural approaches and are aimed at adjusting physical, environmental and psychosocial stressors that may lead to agitation, pacing, aggression, and related behaviors.[1] Research has also shown that verbal, or vocalizing behaviours can be associated with pain, loneliness, depression or other psychological stressors.[7] Agitation can be associated with boredom and the need for activity and stimulation. Aggressive behaviours can often be associated with the resident trying to avoid discomfort, communicate their needs, or make a demand to protect their personal space.[8]

Practice Tip:
Consider using P.I.E.C.E.S™; a person-centred approach for assessment and care planning of persons with BPSD:

- P.I.E.C.E.S. is an acronym that conveys the individuality and importance of the various factors in the well-being, self-determination, and quality of life of older adults.
- 'Putting the P.I.E.C.E.S. Together' represents **P**hysical, **I**ntellectual, **E**motional, **C**apabilities, **E**nvironment, and **S**ocial components, which are cornerstones of the P.I.E.C.E.S. philosophy

Source: www.piecescanada.com

Non-pharmacological strategies should be person-centred and tailored to the individual. Interventions should be guided by the resident's background, likes and dislikes, cultural, any linguistic and religious factors and life experiences, and by the skills and resources available at the residential care facility.[7] The

intervention may be directed at meeting the resident's unmet needs, such as correcting under or over-stimulation, relieving boredom, addressing a lack of exercise, or providing reassurance and comfort. A variety of behavioural interventions indicated in Table 1 that follows may be helpful. Standardized behavioural assessment tools should be used for rating and evaluating behaviours to determine the effectiveness of psychosocial interventions.

Table 1 - Categories for Specific Non-Pharmacologic Interventions for BPSD[9]

Sensory Enhancement/ Relaxation	**Social Contact: Real or Simulated**	**Behaviour Therapy**
• massage and touch • individualized music • white noise • controlled multisensory stimulation (Snoezelen) • art therapy • aroma therapy	• individualized social contact • pet therapy • 1:1 social interaction • simulated interactions/family videos	• differential reinforcement • stimulus Control
Structured Activities	**Environmental Modifications**	**Training and Development**
• recreational activities • outdoor walks • physical activities	• wandering areas natural/enhanced • environments • reduced stimulation • light therapy	• staff education (e.g.: CARE Program, P.I.E.C.E.S., proper communication) • staff support • training programs for family caregivers

Summary

All interventions should be based on an approach that:

- assesses the person's behaviours comprehensively;
- implements person-centred strategies to mitigate antecedents and consequences;
- evaluates and documents outcomes;
- prevents recurrence, and
- focuses on quality improvement.

3. Pharmacological Treatment for BPSD

The *Clinical Practice Guideline on Cognitive Impairment in the Elderly: Recognition, Diagnosis and Management* (2007, revised 2008), developed jointly by the British Columbia Medical Association and the Ministry of Health, recommends environmental and behavioural modifications and psychosocial interventions as first line management for persons with behavioural and psychological symptoms of dementia. It also recommends that physicians exercise caution when prescribing antipsychotic medications for elderly persons with dementia due to their potential adverse effects and the increased risk of death associated with use in this population.

The *BC Clinical Practice Guideline on Cognitive Impairment in the Elderly* recommends that antipsychotic medications be used when:

- alternative therapies are ineffective on their own;
- there is an identifiable risk of harm to the resident and others; and
- the symptoms are severe enough to cause suffering and distress to the individual.

Careful consideration of the benefits and risks of treatment should be assessed as research has demonstrated that these medications can produce serious potential adverse effects resulting in a significantly decreased quality of life for the individual including increased confusion, extra-pyramidal symptoms, anticholinergic effects including delirium, increased risk of falling, increased risk of cerebrovascular events, and increased risk of death.[10] However, when used appropriately, antipsychotic drugs do have the potential to improve the quality of life of older adults experiencing marked agitation.

With the exception of emergency situations, BC's health care consent law requires that the capable resident and/or their substitute decision-maker (when the adult is incapable) must provide consent prior to the prescribing and administration of any health care treatment including pharmacological interventions for BPSD. This enables residents and their close family member(s) to ask questions and make informed decisions about any recommended, medically appropriate health care treatment.

Key considerations:

- Carefully weigh the potential benefits of pharmacological intervention versus the potential for harm.
- Recognize that the evidence base for drug therapy is modest.
  - (Number needed to treat that ranges from 5-14)[†]
- Engage the resident/family/substitute decision-maker in the health care planning and decision-making process.
- Obtain consent for health care treatment from the appropriate decision-maker before administering antipsychotic medication.
- Regularly review the need (or not) for ongoing antipsychotic therapy for behavioural psychological symptoms of dementia and trial withdrawal.

[†] Vancouver Coastal Health Authority. Atypical Antipsychotic Agents - Guideline for use as part of the management strategy of behavioural and psychological symptoms of dementia (BPSD). February 2011.

3.1 Determining the Need for Treatment with Antipsychotic Medications

Before prescribing any antipsychotic medication it is important for the resident's physician or specialist to rule out other illnesses such as a psychiatric condition like depression, acute medical conditions such as infections or a metabolic disturbance, and consider the differential diagnosis including medication treatment and management of coexisting chronic medical conditions that may be contributing to the behaviour. An assessment using the ABC model (antecedents, behaviours, and consequences) should also be conducted. This requires gathering information from the resident's family or substitute decision-maker and several staff members across different shifts to gain a better understanding of the meaning behind the behaviour. This, in turn, assists health care professionals with developing individualized care plans that focus on non-pharmacological interventions.[1,11]

An antipsychotic medication is indicated only if aggression, agitation or psychotic symptoms cause severe distress or an immediate risk of harm to the resident or others, as research has demonstrated that antipsychotic medications have little to no effect on many behavioural and psychological symptoms of dementia.[1]

Table 2- Examples of BPSD Usually not Amenable to Antipsychotic Treatment

• wandering	• vocally disruptive behaviour	• inappropriate voiding
• hiding and hoarding	• inappropriate dressing /undressing	• eating inedible objects
• repetitive activity	• tugging at seatbelts	• pushing wheel chair bound residents

Note: Try to avoid use of antipsychotics if possible for residents with dementia due to Parkinson's disease or Lewy Body dementia. Cholinesterase inhibitors are the first line of treatment for residents with psychosis and aggression associated with these type of dementias. Cholinesterase inhibitor drugs are covered by the Ministry of Health through the Alzheimer Drug Therapy Initiative.

It should be noted that antipsychotics are not effective for all BPSD, and not all psychotic symptoms require pharmacological interventions. Behaviours may be present without causing distress to the resident or others and may respond appropriately with non-pharmacological management.

If it is determined that a course of antipsychotic drug therapy is medically appropriate, it should be considered as a short term strategy with the identification of target symptoms and include planned regular reviews at least every three to six months with the goal to taper off or discontinue entirely. On commencement of therapy, team reviews should be conducted weekly, every 2 weeks and then monthly.

3.2 Consent to Health Care Treatment[12, 16]

BC's *Health Care (Consent) and Care Facility (Admission) Act*[12] (the Act) sets out the requirements for health care providers to follow to ensure that the capable resident, or their substitute decision maker when the resident is incapable, provides consent to treatment before health care is given (also see Health Care Providers' Guide to Consent to Health Care[16]). With few exceptions, it is paramount that the

resident's closest family or friend (of whom one is likely the resident's authorized substitute decision maker) should be included in the consent-seeking process. With respect to rights, the Act states every adult in British Columbia has the right to:

(a) give consent or to refuse consent on any grounds, including moral or religious grounds, even if the refusal will result in death,
(b) select a particular form of available health care on any grounds, including moral or religious grounds,
(c) revoke consent,
(d) expect that a decision to give, refuse or revoke consent will be respected, and
(e) be involved to the greatest degree possible in all case planning and decision making.[12]

The capable resident/family, or the incapable resident's authorized substitute decision maker, should be informed of the benefits and risks of the recommended treatment, the clinical implications of refusing treatment, and be given the opportunity to ask questions of the health care provider (and have them answered) before providing a decision. Any potential adverse effects from the use of antipsychotics, such as the increased risk of stroke or death, should also be discussed when antipsychotic medications are considered medically appropriate and offered to the resident with BPSD.

Table 3- Risks to be Discussed with Resident (if capable) and/or Family/Substitute Decision Maker

• over sedation	• postural hypotension	• risk of falls
• metabolic syndrome	• extra pyramidal symptoms	• tardive dyskinesia
• stroke	• increased mortality	

All information should be provided in a language or method that the resident/family/substitute decision maker can understand. It is suggested that written information be provided so that all are aware of what to expect and also to indicate that the family/substitute decision maker are welcome to actively participate in the developing the plan of care. Information should be culturally appropriate, available in other languages and be accessible to persons with disabilities such as hearing loss. All actions taken should be documented in the resident's chart.

Health care treatment may only be initiated after consent is received from the capable resident or their authorized substitute decision maker. In urgent or emergency situations when no other reasonable course of action remains, drug therapy or transfer to an acute care facility may be required for short term management of an acute behavioural event. If such a situation occurs, treatment must be initiated immediately to minimize distress and danger to the resident and others. When obtaining consent is not possible, it should be obtained from the substitute decision maker as soon as the resident is stabilized.

3.3 Antipsychotic Treatment/Monitoring Effectiveness

Having selected the appropriate medication, the starting dose should be as low as possible. A guiding principle is:

'Start low and go slow' and 'monitor frequently for clinical response and adverse effects'

All medication should initially be considered as a trial for a specified period and aimed at treating the documented targeted behaviours. The length of therapy should be individualized and may depend on the resident's functional status, the target symptoms/behaviour, and the duration, persistence, and severity of symptoms. Treatment should be monitored and tapered as soon as possible. If the medication is found not to be effective, consideration should be given to possible tapering and or discontinuation.

A formal monitoring plan should be established that includes the family, substitute decision maker, and all significant others as active participants in care. Behaviours should be closely monitored for improvement and adverse effects such as constipation, sedation, postural hypotension and extra pyramidal side effects. It is recommended that initial treatment should be reviewed and documented for effectiveness and efficacy within 1- 2 weeks, with a formal review for the purpose of discontinuing treatment at 3 – 6 months.[14] Successful treatment will be indicated by a reduction in the intensity and/or frequency of target symptoms or behaviours.

Table 4 – Examples of Commonly Used Antipsychotic Dosages for the Elderly[14]

Medication	Starting Dose (mg)	Dosing Frequency	Incremental Dose (mg)	Average Total Daily Dose (mg)
quetiapine	12.5	bid/tid/HS (if XR)	12.5-25	150
risperidone	0.25	daily/bid	0.25	1
olanzapine	1.25	daily (HS)/bid	1.25-2.5	5
loxapine	2.5	bid/tid	2.5-5	25
haloperidol	0.25	daily/bid	0.25-0.5	2

Note: For more detailed information on other psychotropic drugs for BPSD please refer to the *Algorithm for Accommodating and Managing Behavioural and Psychological Symptoms of Dementia inn Residential Care* on p. 15.

There is evidence to suggest that while risperidone and olanzapine are useful in reducing aggression, and risperidone is more effective in reducing psychosis. Risperidone is the only atypical antipsychotic medication approved for the short-term treatment of aggression or psychosis in patients with severe dementia.[2]

Despite the modest efficacy, the significant increase in adverse events suggests that neither risperidone nor olanzapine should be used routinely to treat residents with aggression or psychosis unless there is marked risk or severe distress.[1]

Practice Tip:
Consider the following parameters when assessing effectiveness:

- frequency of symptoms
- severity of symptoms
- functional status
- quality of life for resident
- input from resident when possible, physician, health care provider, caregiver, family and substitute decision maker.[13]

Using an observation chart, document the impact the medication is having on mitigating the behaviours as intended.

3.4 Antipsychotic Withdrawal

Expert opinion recommends that physicians and clinicians consider tapering and withdrawing antipsychotics and all other medications used to treat BPSD after 3 months of behavioural stability, and following careful clinical review. All residents, including all newly admitted residents receiving antipsychotic therapy, should be reviewed for gradual dose reduction or discontinuation on a regular basis (e.g., every 3-6 months).[15]

Response usually occurs in 1–2 weeks; taper and discontinue if there is no improvement within 12 weeks and reassess. An alternative antipsychotic may be tried.[14]

Antipsychotics should be withdrawn if there has been no demonstrated improvement in the targeted behaviour or if there are undue adverse effects.

Behaviours or symptoms may persist over time and not everyone on antipsychotics should have their medication changed or stopped (for example, residents with severe, persistent mental illness involving delusions or schizophrenia). Some anecdotal clinical experience suggests that some residents with BPSD may require ongoing maintenance therapy where the consequences of symptom relapse are deemed to be unacceptably severe and no alternative treatment approaches have been deemed effective.[15] Those residents should continue to be reviewed on a regular basis and, at a minimum, annually. Decisions to continue antipsychotics should be documented, including noting the risks and benefits.

4. The Algorithm for Accommodating and Managing BPSD in Residential Care

The *Algorithm for Accommodating and Managing BPSD in Residential Care* is a practical, electronic decision support tool designed to assist physicians, nurses, clinicians, care staff and others in their assessment and care decisions for persons with behavioural and psychological symptoms of dementia (BPSD). The original algorithm was developed by Interior Health Authority and has been reviewed and endorsed for future use provincewide by clinical experts from across British Columbia.

The algorithm is based on national best practices and provides users with quick access to evidence-based information, reliable tools, practical tips and supporting literature. Health authorities, physicians, clinical experts and care staff are encouraged to use and review the algorithm, and consider adapting it for use in all care settings in British Columbia.

The algorithm has two parts and is integral to the *Best Practice Guideline for Accommodating and Managing Behavioural and Psychological Symptoms of Dementia in Residential Care*, and is found at www.bcbpsd.ca.

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