The New Canadian
Guidelines on
Benzodiazepine
Receptor Agonist
Use Disorder
Among Older
Adults





Canadian Coalition for Seniors' Mental Health

To promote seniors' mental health by connecting people, ideas and resources.

Coalition Canadienne pour la Santé Mentale des Personnes Âgées Promouvoir la santé mentale des personnes âgées en reliant les personnes, les idées et les ressources. Dr. David Conn
Co-Chair CCSMH
Baycrest & University of
Toronto
9th. June 2019

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None

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None

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Overview of presentation

- Acknowledgements
- Defining Substance Use Disorder
- Substance use among older adults
- Scope of Guidelines Project
- Benzodiazepines and z-drugs = BZRAs how they work
- Prevalence and patterns of use among older adults
- Guideline Recommendations

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 Claire Checkland (Project Director) Indira Fernandez (Project Coordinator)

<u>Guidelines Steering Committee</u>: D. Conn (chair). P.Butt, M. White-Campbell. J. Bertram, A. Porath, D. Seitz; D. Hogan, Z. Samaan, L. Rieb., K. Rabheru.

- Steering Committee of CCSMH & Co-chair K. Rabheru
- Canadian Centre on Substance Use & Addiction (CCSA)
- Behavioural Supports Ontario Substance Use Collaborative
- Baycrest, Bruyere, CAGP, CAMH, CGS, CMHA, NICE, Reconnect (COPA)
- Reviewers: Dr. S. Davies, Dr. B. Farrell, Dr. M. Kahan, Dr. K. Reimers
- Health Canada Substance Use and Addictions Program (SUAP)

The views expressed herein do not necessarily represent the views of Health Canada.

BZRA Working Group

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- "Canadians have several misperceptions when it comes to substance use among older adults.
- Some don't think it's an issue at all.
 Others believe it's too late to
 improve the quality of life of
 someone who uses substances in
 older age.
- Why try to get somebody to quit smoking after 50 years? Isn't the damage already done?



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The Continuum of Prescription Drug Use

- Appropriate Use
- Potentially Inappropriate Use
 - indication
 - dose/route/frequency
 - balance of benefits/risks
- **Use Disorders** (consequences)
 - **Dependence** (tolerance/withdrawal/loss of control)

Substance Use Disorder DSM-IV versus DSM-5

	DSM-IV Abuse ^a		DSM-IV Dependence ^b		DSM-5 Substance Use Disorders ^c	
Hazardous use	X	ו	_		X	1
Social/interpersonal problems related to use	X]	_		X	
Neglected major roles to use	X	criterion	_		X	
Legal problems	X	J	_		_	
Withdrawal ^d	_		х	1	X	
Tolerance	_		X		X	≥2
Used larger amounts/longer	_		X		X	criteria
Repeated attempts to quit/control use	_		X	≥3 criteria	X	
Much time spent using	_		X	Criteria	X	
Physical/psychological problems related to use	_		X		X	
Activities given up to use	_		X	J	X	
Craving	_		_		X	J



BMJ 2017;358:j3885 doi: 10.1136/bmj.j3885 (Published 2017 August 21)

Page 1 of 2



EDITORIALS

Substance misuse in older people

Baby boomers are the population at highest risk

Rahul Rao visiting researcher¹, Ann Roche director²

¹South London and Maudsley NHS Foundation Trust, London, UK; ²National Centre for Training and Addiction, Flinders University Faculty of Medicine, Nursing and Health Sciences, Adelaide, Australia

Alcohol

Baby boomers' drink and drug misuse needs urgent action, warn experts

By 2020, the number of over-50s receiving treatment for substance misuse problems is expected to double in Europe and treble in the US, say researchers



Wednesday 23 August 2017 06.00 BST



A 2011 report advised that due to age-related physiological and metabolic changes, older people should drink no more than 11 units of alcohol per week. Photograph: Alamy

Substance Use Disorder Among Older Adults

What Do We Know About Substance Use In Older Adults?

- Increased vulnerability to effects of substance due to unique physiological, psychological, social and pharmacological factors
- The challenge of complex clinical presentations
- Co-morbidities, cognitive impairment, polysubstance use
- Under-identified and understudied
- Stigma



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Which substance do you believe is currently causing the most harm to older adults in Canada?

- Alcohol
- Benzodiazepines
- Cannabis
- Opioids
- Nicotine
- Other

Scope of Guideline Project

- The Canadian Coalition for Seniors Mental Health (CCSMH) funded by the Substance Use and Addictions Program (SUAP) of Health Canada to create a set of four guidelines:
- The prevention, assessment, and management of substance use disorders among older adults for Alcohol, BZRAs, Cannabis, and Opioids.

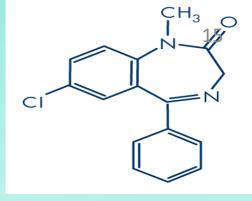
GRADE approach

- The GRADE approach was utilized in the creation of these guidelines.
- Quality of evidence for each recommendation:
 High, Moderate or Low
- Strength of each recommendation: Strong or Weak
- Alternative rating for some recommendations = C (Consensus)
 - not based on empirical evidence

Guyatt, Gordon et al. (2008). GRADE: An emerging consensus on rating quality of evidence and strength of recommendations. BMJ (Clinical research ed.). 336. 924-6.

Brief History of Benzodiazepines

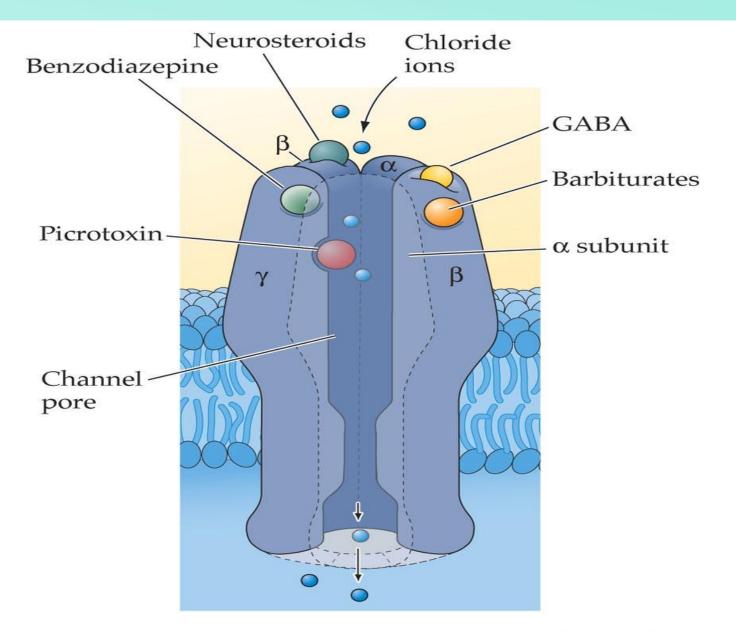
- 1957 chlordiazepoxide Roche (Librium) 1963 diazepam (Valium) – faster onset, more potent
- BZDs = anxiolytic ("minor tranquilizers")
 - replaced barbituates and meprobamate
- Examples: lorazepam, oxazepam, clonazepam, diazepam, temazepam
- Prescribed for: anxiety, sleep, seizures, muscle relaxant, sedative withdrawal





BZRAs — Benzodiazepine receptor agonists

- Include benzodiazepines and also z-drugs that work in a similar fashion on the same receptors.
- Z-drugs include zopiclone (Imovane) and zolpidem (Ambien) prescribed for insomnia.
- modulate benzodiazepine specific subunit sites, as specific agonists of the GABA-a receptors



Quiz

- Which of the following classes of medication are associated with an increased risk of falls among older adults:
 - a) antidepressants
 - b) benzodiazepines
 - c) antipsychotics
 - d) non-steroidal anti-inflammatories (NSAIDs)
 - e) all of the above

Meta-analysis of the Impact of 9 Medication Classes on Falls in Elderly Persons

John C. Woolcott, MA; Kathryn J. Richardson, MSc; Matthew O. Wiens, BSc, Pharm, PharmD; Bhavini Patel, MPharm; Judith Marin, BPharm, PharmD; Karim M. Khan, MD, PhD; Carlo A. Marra, BSc, Pharm, PharmD, PhD

- neuroleptics / antipsychotics, OR, 1.59 (95% Crl, 1.37-1.83);
- antidepressants, OR, 1.68 (95% Crl, 1.47-1.91);
- benzodiazepines, OR, 1.57 (95% Crl, 1.43-1.72),
- NS anti-inflammatories, OR 1.21 (95% Crl, 1.01-1.44)

Arch Intern Med. 2009;169(21):1952-1960.

BZRAs – Adverse effects

- sedation,
- psychomotor impairment,
- falls
- motor vehicle accidents
- cognitive impairment
- delirium especially on withdrawal
- paradoxical agitation,
- dependency

Quiz

 Over the past 20 years the rate of use of benzodiazepines among older adults in Canada has:

- a) Declined
- b) Increased
- c) Stayed about the same

Benzodiazepine prescription in Ontario residents aged 65 and over: a population-based study from 1998 to 2013

Simon J.C. Davies, Binu Jacob, David Rudoler, Juveria Zaheer, Claire de Oliveira and Paul Kurdyak

Ther Adv Psychopharmacol 2018, Vol. 8(3) 99-114

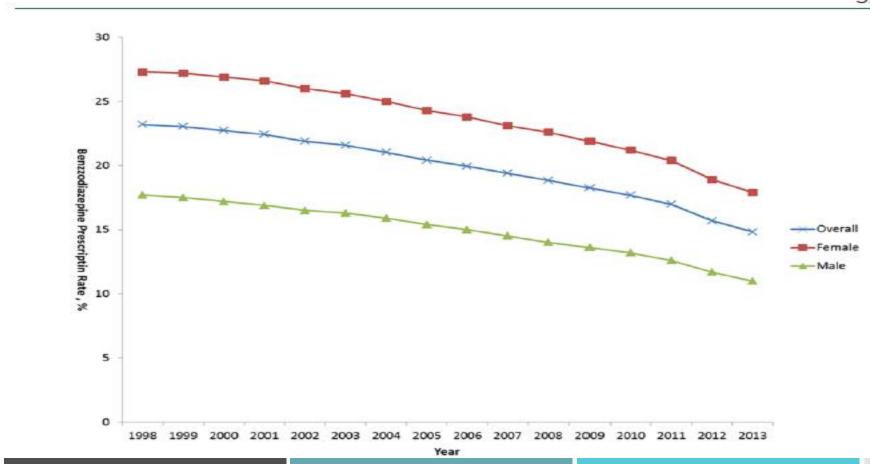
DOI: 10.1177/ 2045125317743651

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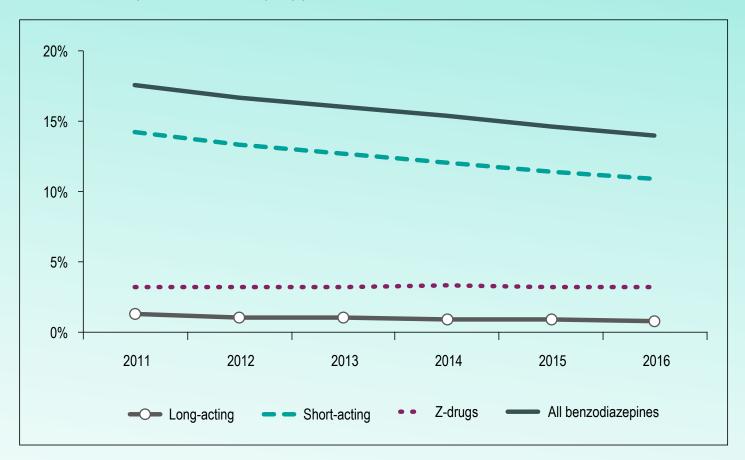
SJC Davies, B Jacob et al.



Prevalence of substance dependence among older adults taking benzodiazepines

 A Quebec study of older adults reported that 9.5% of those taking benzodiazepines met Diagnostic and Statistical Manual of Mental Disorders (DSM) criteria for substance dependence (Voyer et al., 2010).

Figure 16 Seniors' usage rate of benzodiazepines (and related products), by type, Canada,* 2011 to 2016



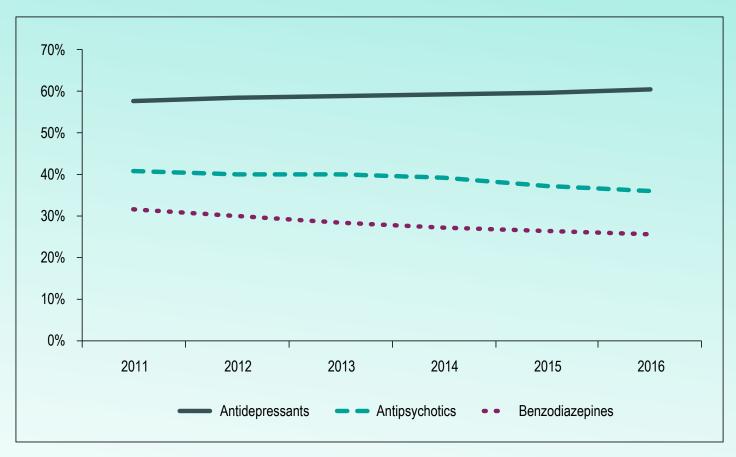
Note

* The Northwest Territories and Nunavut do not currently submit data to NPDUIS. Quebec has been excluded because data was not available prior to 2014.

Source

National Prescription Drug Utilization Information System, Canadian Institute for Health Information.

Figure 19 Percentage of seniors living in LTC facilities prescribed psychotropic drugs, by type of drug, selected jurisdictions,* 2011 to 2016



Note

* There were 5 provinces submitting identifiable LTC data to NPDUIS as of November 2017: Prince Edward Island, New Brunswick, Ontario, Manitoba and British Columbia.

Source

National Prescription Drug Utilization Information System, Canadian Institute for Health Information.

Benzodiazepine Use in Older Adults in the United States, Ontario, and Australia from 2010 to 2016

Jonathan Brett, MBBS,* • Donovan T. Maust, MD, MS, $^{\dagger \downarrow \S}$ Zach Bouck, MPH, ¶ Rosalinda V. Ignacio, MS, $^{\dagger \downarrow \S}$ Graham Mecredy, MSc, $^{\parallel}$ Eve A. Kerr, MD, MPH, $^{\dagger \S}$ ** Sacha Bhatia, MD, MBA, ¶ Adam G. Elshaug, PhD, $^{\dagger \uparrow}$ and Sallie A. Pearson, PhD * $^{\dagger \uparrow}$

JAGS 2018

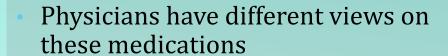
Table 1. Characteristics	of the Three Study l	Populations
(2010-2016) Expressed	Per 1000 People	-

Characteristic	United States, 3,888	Ontario, n = 2,595	Australia, n=1,787
Study	3,888	2,595	1,787
population, n			
Age, n (%)			
65-74	2,442 (62.8)	1,736 (66.9)	888 (49.7)
75–84	1,049 (27.0)	626 (24.1)	646 (36.1)
≥85	398 (10.2)	234 (9.0)	254 (14.2)
Sex, n (%)			
Female	78 (2.0)	1,420 (54.7)	1,010 (56.5)
Male	3,810 (98.0)	1,175 (45.3)	777 (43.5)
≥1 benzodiazepine dispensed, n (%)	527 (13.6)	686 (26.4)	332 (18.6)
Age, n (%)			
65-74	360 (68.3)	357 (52.0)	141 (42.5)
75-84	125 (23.6)	221 (32.3)	128 (38.7)
≥85	43 (8.1)	108 (15.7)	62 (18.8)
Sex, n (%)			
Female	14 (2.6)	439 (64.0)	221 (66.7)
Male	513 (97.4)	247 (36.0)	111 (33.3)

Case vignettes

- 67 year old single woman. Works PT as a bookkeeper. Long-standing anxiety disorder, persistent depressive disorder and chronic severe headaches. On an SSRI (sertraline) but also clonazepam 0.5 mg qam and 1 mg qhs for many years and also uses large quantities of acetaminophen with codeine which she buys OTC (for the headaches). Sleep frequent awakenings.
- 75 year old man presents with severe Major Depressive Episode with anxious distress. He has also developed some agoraphobic symptoms afraid to leave home. Recent successful treatment for carcinoma of the larynx. Has not responded well to 2 antidepressants. Reports lorazepam helped greatly during a previous similar episode. Has 10-12 drinks of alcohol per week.
- 85 year old Holocaust survivor. PTSD, persistent depressive disorder and early dementia. On multiple psychotropic meds including lorazepam 1 mg tid. Insists she "can't manage" without the lorazepam. Has become more disinhibited lately and has been "stealing" her husband's lorazepam.

Benzodiazepine Challenges



- Patients tend to have relatively positive feelings about this group of medications
- Existing guidelines frequently recommend benzodiazepine use only for short periods of time (especially in older adults). This often contradicts current clinical practice e.g. in care of people with longstanding mental disorders.
- Limited literature on benzodiazepine <u>use disorder</u> among older adults – more literature on over prescribing, adverse effects etc.



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Characteristics of long-term BZRA use

- Older age, female, lower income, single
- Comorbidities (psychiatric and medical).
- Use of short acting, high potency BZD (e.g. alprazolam, lorazepam, or oxazepam).
- Receiving prescriptions for more than one BZD concurrently.
- "Volume" of the initial or overall BZD prescriptions (overall prescribed dosage).
- Previous BZD use.
- Dose escalation is associated with a greater number of prescribers, concurrent SUD

Factors contributing to long-term prescription of BZD and Z-drugs

Prescriber's factors:

- Attitudes towards these medications
- Lack of specialized knowledge about sedative prescribing
- Clinical work environment
- Conflicting patient health priorities
- Worry about stopping medications started by others
- Limited knowledge about how to stop medications
- Inaccessibility to nonpharm tx modalities

• Patient's factors:

- Disagreement with the appropriateness of stopping tx
- Fears of symptom return
- Withdrawal symptoms
- Impression of unsuitability of alternatives

American Geriatrics Society 2019 Updated AGS Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults

By the 2019 American Geriatrics Society Beers Criteria® Update Expert Panel*

- Older adults have increased sensitivity to benzodiazepines AVOID
- May be appropriate for seizure disorders, REM sleep disorders, BZD withdrawal, alcohol withdrawal, severe GAD, periprocedural anesthesia
- Z-drugs similar to benzodiazepines AVOID

Quick Summary - BZRA use disorder Guideline recommendations for older adults

	PREVENTION
1	Use > 4 weeks should be avoided
2	Not first-line for insomnia, anxiety, or dementia
3	CBT is first-line for insomnia and anxiety
4	Assess risk for BZRA use disorder prior to prescribing
5	Inform of limited benefits, risks, & alternatives
	before setting management plan
6	Inform of duration of use when initiating
7	When BZRA prescribed:
	a. Discuss risks
	b. Use for ≤4 weeks
	c. Monitor for response, side effects,
	concordance, BZRA use disorder
	d. Support when stopping BZRA (e.g., GDR)
8	HCPs and organizations should work to reduce use
	of BZRAs
9	Institutions should reduce BZRA incident use
10	Advocate for funding of non-pharmacological
	alternatives
11	Clinicians to address excess use of BZRAs in women

	ASSESSMENT & RECOGNITION	
12	Routinely assess older persons for substance use	
	disorders, including BZRAs	
13	HCPs are to be skilled in identifying substance use	
	disorders, including BZRAs	
14	Fully assess people with suspected BZRA use disorder	
15	a. Assess for other substances in BZRA use disorder	
	b. Avoid concurrent BZRAs and opioids	
	c. Avoid concurrent BZRAs and alcohol	
MANAGEMENT		
16	Stop BZRAs using a stepped-care gradual taper	
17	Avoid abrupt discontinuation of BZRA use of >4 weeks	
18	Manage acute BZRA withdrawal using a validated	
10	approach	
19	Convert to single BZRA when multiple BZRAs Rx'd	
20	Routinely switching to a long half-life BZRA for	
20	tapering is not recommended	
21	CBT is to be used during BZRA taper	
22	Avoid adding new drugs to support BZRA tapers	
23	Refer selected patients to specialty services	

- Long-term use of BZRAs (> 4 weeks) in older adults should be avoided for most indications because of their minimal efficacy and risk of harm.
- Older adults have increased sensitivity to BZRAs and decreased ability to metabolize some longer-acting agents, such as diazepam. All BZRAs increase the risk of cognitive impairment, delirium, falls, fractures, hospitalizations, and motor vehicle crashes.
- Alternative management strategies for insomnia, anxiety disorders, and the behavioural and psychological symptoms of dementia (BPSD) are recommended.

[GRADE: Evidence: Moderate; Strength: Strong]

Appropriate first-line non-pharmacological options for the treatment of insomnia and anxiety disorders include cognitive behaviour therapies (CBTs) provided in various formats.

(e.g. CBTi includes stimulus control, sleep restriction, progressive muscle relaxation and sleep hygiene)

[GRADE: Evidence: Moderate; Strength: Strong]

 A BZRA should only be considered in the management of insomnia or anxiety after failing adequate trials of non-pharmacological interventions or safer pharmacological alternatives OR for short-term bridging until more appropriate treatment becomes effective.

[GRADE: Evidence: Moderate; Strength: Strong]

 An assessment of risk for BZRA use disorder and other potential adverse effects from these agents should be done prior to prescribing a BZRA.

[Consensus]

(Identified risk factors include: older age, female gender, dependent personality, and concurrent or previous substance use disorder)

 If a BZRA is being considered, the older adult should be informed of both the limited benefits and risks associated with use, as well as alternatives, prior to deciding on a management plan.

 Initiating treatment with a BZRA should be a shared decision between the prescriber and the older adult (or their substitute decision-maker). There should be agreement and understanding on how the BZRA is to be used (including planned duration of no more than 2 to 4 weeks) and monitored.

Quiz

• Providing an educational brochure for patients, without any other intervention, can lead to reduced use of benzodiazepines:

- a) True
- b) False

Reduction of Inappropriate Benzodiazepine Prescriptions Among Older Adults Through Direct Patient Education The EMPOWER Cluster Randomized Trial

Cara Tannenbaum, MD, MSc; Philippe Martin, BSc; Robyn Tamblyn, PhD; Andrea Benedetti, PhD; Sara Ahmed, PhD

JAMA Intern Med. 2014;174(6):890-898. doi:10.1001/jamainternmed.2014.949 Published online April 14, 2014.

- Long Term benzodiazepine users aged 65 95
- 27% who received education discontinued versus 5% who did not.
- EMPOWER tool included information on risks and a tapering protocol.

Older adults who are receiving a BZRA should be:

- Educated and provided the opportunity to discuss the ongoing risks of taking BZRAs [GRADE: Evidence: Moderate; Strength: Strong]
- Encouraged to only take the BZRA for a short period of time (2 to 4 weeks or less) at the minimally effective dose [GRADE: Evidence: Moderate; Strength: Strong]
- Monitored during the course of their prescription for evidence of treatment response and effectiveness, current and potential adverse effects, concordance with the treatment plan, and/or the development of a BZRA use disorder [consensus]
- Supported in stopping the drug, which may require a gradual reduction until discontinued. [GRADE: Evidence: Moderate; Strength: Strong]

- Health care providers and organizations should consider implementing interventions to decrease inappropriate use of BZRAs in their practice settings. These include medication reviews, prescribing feedback, audits and alerts, multidisciplinary case conferences, and brief educational sessions.
- Regulators, health authorities, and professional organizations should consult with clinical leaders and older adults to develop and implement policies that aim to minimize inappropriate use of BZRAs.

[GRADE: Evidence: Low; Strength: Strong]

 Health care institutions, including acute care hospitals and long-term care facilities, should implement protocols that minimize new prescriptions for BZRAs because of the potential for harm and the risk of this leading to longterm use following discharge to the community or other transitions in care.

[GRADE: Evidence: Low; Strength: Strong]

 Health care practitioners, older adults, and their families should advocate for adequate access and funding of effective non-pharmacological alternatives for the management of insomnia, anxiety disorders, and BPSD.

[GRADE: Evidence: Low; Strength: Strong]

 Clinicians should be aware that BZRAs are prescribed more frequently to women and the potential implicit bias that may lead to inappropriate use.

[GRADE: Evidence: Low; Strength: Weak]

 All older adults should be asked about current and past consumption of substances that might lead to substance use disorders, including BZRAs, during periodic health examinations, admissions to facilities or services, perioperative assessments, when considering the prescription of a BZRA, and at transitions in care.

Useful Screening Tool

Severity of Dependence Scale

5 items (0 – never, 1- sometimes, 2 – often, 3 – always) Score >6 high sensitivity and specificity for BZD use disorder

- 1. Do you think your use of BZDs is out of control?
- 2. Does the prospect of missing a dose make you worried?
- 3. Do you worry about your use of BZDs?
- 4. Do you wish you could stop?
- 5. How difficult would you find it to stop your BZDs?

Screening – For multiple substances

Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) - WHO

http://www.who.int/substance abuse/activities/assist test/en/

- screens for 10 substances
- 8 questions:
 - ever used
 - frequency of use
 - cravings
 - consequences
 - failure to meet obligations
 - concern by others
 - unable to cut down
 - IV drug use

Khan R, Chatton A, Thorens G, Achab S, Nallet A, Broers B, Calzada G, Poznyak V, Zullino D, Khazaal Y. Validation of the French version of the alcohol, smoking and substance involvement screening test (ASSIST) in the elderly. Subst Abuse Treat Prev Policy. 2012 Jun 20;7:14.

 Health care practitioners should be aware of and vigilant to the symptoms and signs of substance use disorders, including BZRA use disorder.
 Particular attention should be paid to this possibility when assessing common conditions encountered in older adults, such as falls and cognitive impairment.

 Assessment of older adults suspected of having a BZRA use disorder should include indication, dose, duration, features indicative of BZRA use disorder, readiness to change, and presence of both medical and psychiatric comorbidities, including any other past or current substance use or misuse.

 Multiple substance use is common and should be considered and inquired about in all older adults with a BZRA use disorder.

[GRADE: Evidence: Moderate; Strength: Strong]

 Health care practitioners should avoid prescribing BZRAs concurrently with opioids whenever possible.

[GRADE: Evidence: Moderate; Strength: Strong]

The combination of a BZRA with alcohol should be avoided.

[GRADE: Evidence: Low; Strength: Weak]

A person-centred, stepped-care approach to enable the gradual withdrawal and discontinuation of BZRAs should be used. Clinicians and patients should share in:

- a) planning and applying a gradual dose reduction scheme supported by appropriate education of the patient;
- b) identifying and optimizing alternatives to manage the underlying health issue(s) that initiated or perpetuated the use of BZRAs;
- c) developing strategies to minimize acute withdrawal and managing rebound symptoms as needed; and
- d) establishing a schedule of visits for reviewing progress.

[GRADE: Evidence: Moderate; Strength: Strong]

Abrupt discontinuation of a BZRA after intermediate to long-term use (> 4 weeks) in individuals with BZRA use disorder should be avoided due to the risk of withdrawal symptoms, substance dependence reinforcement, rebound phenomena, and/or higher likelihood of relapse with resumption of BZRA use.

[GRADE: Evidence: Moderate; Strength: Strong]

Recommended tapering schedule

Duration of Use	Recommended taper rate	Recommended taper durations	Comments
< 2 to 4 weeks	N/A	N/A	Tapering may not be required unless there are signs of (or multiple risk factors for) withdrawal syndrome
4 weeks to 6 months	10% to 25% of current BZRA dose every 1 to 2 weeks (consider slower rate at end)	1 to 3 months	Factors to be considered in deciding on rate of tapering include current BZRA dose, half-life of the agent, severity of substance use disorder or other BZRA adverse effects, emergence of withdrawal symptoms, presence of polysubstance use, drug
> 6 months	10% of current BZRA dose every 2 to 4 weeks (slower rate at end)	3 to 6 months	formulation and ease of dividing/compounding, and patient preference

 Management of acute BZRA withdrawal symptoms should be monitored carefully and can be guided by a validated tool [e.g. Benzodiazepine Withdrawal Symptom Questionnaire, Clinical Institute Withdrawal Assessment-Benzodiazepine (CIWA-B)] and managed with symptom-driven judicious use of an appropriate BZRA.

[GRADE: Evidence: Low; Strength: Weak]

 Regimens involving multiple BZRAs should be simplified and converted to a single BZRA.

The routine switching of a short half-life BZRA with one having a long half-life
to aid in withdrawing BZRAs is not generally recommended in older adults.
 Switching may have a role in certain situations, such as when withdrawal is
being hindered by a limited number of available BZRA pill strengths or when
alprazolam is the agent of dependence or misuse.

[GRADE: Evidence: Moderate; Strength: Strong]

 Psychological interventions such as CBT should be considered during efforts to withdraw BZRAs as they can improve the older adult's experiences and increase the likelihood of stopping the BZRA.

[GRADE: Evidence: High; Strength: Strong]

(A meta-analysis of adults aged 50+ in various treatment settings by Gould et al. (2014) found odds ratios for not using benzodiazepines at the completion of the intervention and then 3 and 12 months afterwards of 5.06, 3.90, and 3.00, respectively, when GDR was combined with psychological interventions (Gould et al., 2014.)

 Substituting a pharmacologically different drug as a specific intervention to mitigate BZRA withdrawal symptoms during gradual dose reduction is not routinely recommended

(multiple medication studied including buspirone, trazodone, melatonin, gabapentin, pregabalin)

[GRADE: Evidence: Moderate; Strength: Strong]

Older adults with a BZRA use disorder whose drug use is escalating in spite
of medical supervision, have failed prior efforts to withdraw their BZRA, are
at high risk for relapse or harm, and/or suffer from significant
psychopathology should be considered for referral to a specialty addiction
or mental health service.

RESOURCES: deprescribing.org

Dr. Barbara Farrell and Team., Bruyere, Ottawa





Our Vision & Mission

Our vision for this website is to share and exchange information about deprescribing approaches and deprescribing research with the public, health care providers and researchers.

Our mission is to offer:

- 1. Tools to help patients and providers participate in deprescribing
- Information about ongoing and completed deprescribing initiatives and research projects in Canada

RESOURCES: deprescribing.org



deprescribing.org | Benzodiazepine & Z-Drug (BZRA) Deprescribing Algorithm

March 2016

Why is patient taking a BZRA?

If unsure, find out if history of anxiety, past psychiatrist consult, whether may have been started in hospital for sleep, or for grief reaction.

 Insomnia on its own OR insomnia where underlying comorbidities managed For those ≥ 65 years of age: taking BZRA regardless of duration (avoid as first line therapy in older people) For those 18-64 years of age: taking BZRA > 4 weeks

Engage patients (discuss potential risks, benefits, withdrawal plan, symptoms and duration)

Recommend Deprescribing

Taper and then stop BZRA

(taper slowly in collaboration with patient, for example ~25% every two weeks, and if possible, 12.5% reductions near end and/or planned drug-free days)

- For those ≥ 65 years of age (strong recommendation from systematic review and GRADE approach)
- For those 18-64 years of age (weak recommendation from systematic review and GRADE approach)
- Offer behavioural sleeping advice; consider CBT if available (see reverse)

Monitor every 1-2 weeks for duration of tapering

Expected benefits:

· May improve alertness, cognition, daytime sedation and reduce falls

Withdrawal symptoms:

 Insomnia, anxiety, irritability, sweating, gastrointestinal symptoms (all usually mild and last for days to a few weeks)

Use non-drug approaches to manage insomnia

Use behavioral approaches and/or CBT (see reverse)

Other sleeping disorders (e.g. restless legs)

- Unmanaged anxiety, depression, physical or mental condition that may be causing or aggravating insomnia
- Benzodiazepine effective specifically for anxiety
- Alcohol withdrawal

Continue BZRA

- · Minimize use of drugs that worsen insomnia (e.g. caffeine, alcohol etc.)
- Treat underlying condition
- Consider consulting psychologist or psychiatrist or sleep specialist

If symptoms relapse:

Consider

 Maintaining current BZRA dose for 1-2 weeks, then continue to taper at slow rate

Alternate drugs

Other medications have been used to manage insomnia. Assessment of their safety and effectiveness is beyond the scope of this algorithm. See BZRA deprescribing guideline for details.

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Pottie K, Thompson W, Davies S, Grenier J, Sadowski C, Welch V, Holbrook A, Boyd C, Swenson JR, Ma A, Farrell B (2016). Evidence-based clinical practice guideline for deprescribing benzodiazepine receptor agonists. Unpublished manuscript.







deprescribing.org



deprescribing.org | Benzodiazepine & Z-Drug (BZRA) Deprescribing Notes

March 2016

BZRA Availability

BZRA	Strength
Alprazolam (Xanax®) [†]	o.25 mg, o.5 mg, 1 mg, 2 mg
Bromazepam (Lectopam®) [™]	1.5 mg, 3 mg, 6 mg
Chlordiazepoxide (Librax®) ^C	5 mg, 10 mg, 25 mg
Clonazepam (Rivotril®) T	o.25 mg, o.5 mg, 1 mg, 2 mg
Clorazepate (Tranxene®) ^C	3.75 mg, 7.5 mg, 15 mg
Diazepam (Valium®) [™]	2 mg, 5 mg, 10 mg
Flurazepam (Dalmane®) ^c	15 mg, 30 mg
Lorazepam (Ativan®) ^{T, S}	0.5 mg, 1 mg, 2 mg
Nitrazepam (Mogadon®) [™]	5 mg, 10 mg
Oxazepam (Serax®) ^T	10 mg, 15 mg, 30 mg
Temazepam (Restoril®) ^C	15 mg, 30 mg
Triazolam (Halcion®) [⊤]	0.125 mg, 0.25 mg
Zopiclone (Imovane®, Rhovane®) T	5mg, 7.5mg
Zolpidem (Sublinox®) ⁵	5mg, 10mg

T = tablet, C = capsule, S = sublingual tablet

BZRA Side Effects

- BZRAs have been associated with:
 - physical dependence, falls, memory disorder, dementia, functional impairment, daytime sedation and motor vehicle accidents
- Risks increase in older persons

Engaging patients and caregivers

Patients should understand:

- . The rationale for deprescribing (associated risks of continued BZRA use, reduced long-term efficacy)
- · Withdrawal symptoms (insomnia, anxiety) may occur but are usually mild, transient and short-term (days to a few weeks)
- They are part of the tapering plan, and can control tapering rate and duration

Tapering doses

- No published evidence exists to suggest switching to long-acting BZRAs reduces incidence of withdrawal symptoms or is more effective than tapering shorter-acting BZRAs
- If dosage forms do not allow 25% reduction, consider 50% reduction initially using drug-free days during latter part of tapering, or switch to lorazepam or oxazepam for final taper steps

Behavioural management

Primary care:

- 1. Go to bed only when sleepy
- 2. Do not use bed or bedroom for anything but sleep
- 3. If not asleep within about 20-30min at the beginning of the night or after an awakening, exit the bedroom
- If not asleep within 20-30 min on returning to bed,
- 5. Use alarm to awaken at the same time every morning
- 6. Do not nap
- 7. Avoid caffeine after noon
- 8. Avoid exercise, nicotine, alcohol, and big meals within 2 hrs of bedtime

Institutional care:

- 1. Pull up curtains during the day to obtain bright light exposure
- 2. Keep alarm noises to a minimum
- 3. Increase daytime activity & discourage daytime sleeping
- 4. Reduce number of naps (no more than 30mins and no naps after 2pm)
- Offer warm decaf drink, warm milk at night
- 6. Restrict food, caffeine, smoking before bedtime
- 7. Have the resident toilet before going to bed
- 8. Encourage regular bedtime and rising times
- 9. Avoid waking at night to provide direct care
- 10. Offer backrub, gentle massage

Using CBT

What is cognitive behavioural therapy (CBT)?

 CBT includes 5-6 educational sessions about sleep/insomnia, stimulus control, sleep restriction, sleep hygiene, relaxation training and support

Does it work?

. CBT has been shown in trials to improve sleep outcomes with sustained long-term benefits

 Clinical psychologists usually deliver CBT, however, others can be trained or can provide aspects of CBT education; self-help programs are available

How can providers and patients find out about it?

Some resources can be found here: http://sleepwellns.ca/

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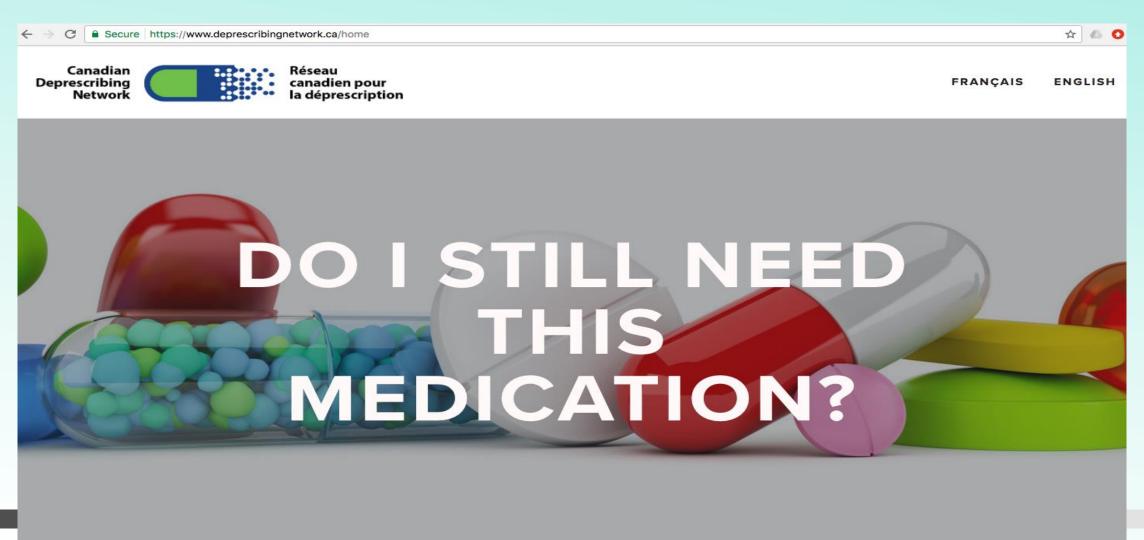








Canadian Deprescribing Network (CaDeN) www.deprescribingnetwork.ca Dr. Cara Tenenbaum and Team., Montreal



EMPOWER brochure www.criugm.qc.ca/fichier/pdf/BENZOeng.pdf



You May Be at Risk

You are taking one of the following sedative-hypnotic medications:

- Alprazolam (Xanax®)
- Bromazepam (Lectopam®)
- Chlorazepate
- Chlordiazepoxideamitriptyline
- Clidinium-chlordiazepoxide
- O Clobazam
- Clonazepam (Rivotril®, Klonopin®)

- Diazepam (Valium®)
- Estazolam
- O Flurazepam
- Coprazolam
- O Lorazepam (Ativan®)
- Cormetazepam
- Nitrazepam
- Oxazepam (Serax®)
- Quazepam

- Temazepam (Restoril®)
- Triazolam (Halcion®)
- Eszopiclone (Lunesta®)
- Zaleplon (Sonata®)
- Zolpidem (Ambien®, Intermezzo®, Edluar®, Sublinox®, Zolpimist®)
- Zopiclone (Imovane®, Rhovane®)

- quiz (myths)
- education
 - risks
 - alternatives (non-pharm for anxiety and sleep)
- consumer story
- tapering schedule
- Qs to ask your HCP







Do you have insomnia?

There is a good chance that you have insomnia if you check each of these boxes:

You have been experiencing one or more of the following sleep difficulties:

• It takes you a long time to fall asleep

More details

There is a lot more to know about insomnia and other sleep problems. See what we recommend for you to look at.

Other Resources













































Managing Benzodiazepine Use in Older Adults

This tool is designed to help primary care providers assess and discuss with their patients 65 years of age or older, the potential risks and benefits of benzodiazepines. This tool also contains steps to support primary care providers in safely discontinuing, starting or continuing to prescribe benzodiazepines for their older patients.

SECTION A: Potential risks and benefits of benzodiazepines

Benzodiazepines are not the preferred treatment for anxiety disorders, insomnia or panic disorder among older adults. 1-4 As patients age, their bodies respond to medications differently, and some medications become less safe than others. It is important to re-evaluate all medications as a patient approaches the age of 65. Re-evaluating the risks and benefits of concurrent medications is a routine part of medicine. It is particularly important to review the use of benzodiazepines, given the patient safety risks associated with the use of this medication in advanced age, as discussed in this tool.

POTENTIAL RISKS	POTENTIAL BENEFITS
Older adults have an increased sensitivity to benzodiazepines and decreased metabolism of long-acting agents All benzodiazepines increase the risk of cognitive impairment, delirium, falls, fractures and motor vehicle accidents in older adults	Anxlety disorders: NNT at 4-6 weeks = 7 ⁵ Insomnia: NNT at 2 weeks = 13 ³ - 34.2 additional minutes of sleep - 0.60 less awakenings per night
• Insomnia - NNH for any harm at 2 weeks = 63	• Panic disorder: NNT (timeframe unknown) = 56

Quick Summary - BZRA use disorder recommendations for older adults

	PREVENTION
1	Use > 4 weeks should be avoided
2	Not first-line for insomnia, anxiety, or dementia
3	CBT is first-line for insomnia and anxiety
4	Assess risk for BZRA use disorder prior to prescribing
5	Inform of limited benefits, risks, & alternatives
	before setting management plan
6	Inform of duration of use when initiating
7	When BZRA prescribed:
	a. Discuss risks
	b. Use for ≤4 weeks
	c. Monitor for response, side effects,
	concordance, BZRA use disorder
	d. Support when stopping BZRA (e.g., GDR)
8	HCPs and organizations should work to reduce use
	of BZRAs
9	Institutions should reduce BZRA incident use
10	Advocate for funding of non-pharmacological
	alternatives
11	Clinicians to address excess use of BZRAs in women

	ASSESSMENT & RECOGNITION
12	Routinely assess older persons for substance use
	disorders, including BZRAs
13	HCPs are to be skilled in identifying substance use
	disorders, including BZRAs
14	Fully assess people with suspected BZRA use disorder
15	a. Assess for other substances in BZRA use disorder
	b. Avoid concurrent BZRAs and opioids
	c. Avoid concurrent BZRAs and alcohol
	A A A A A C C A A C A I T
	MANAGEMENT
16	Stop BZRAs using a stepped-care gradual taper
17	Avoid abrupt discontinuation of BZRA use of >4 weeks
18	Manage acute BZRA withdrawal using a validated
	approach
19	Convert to single BZRA when multiple BZRAs Rx'd
20	Routinely switching to a long half-life BZRA for
	tapering is not recommended
21	CBT is to be used during BZRA taper
22	Avoid adding new drugs to support BZRA tapers
23	Refer selected patients to specialty services

Questions





Canadian Coalition for Seniors' Mental Health

To promote seniors' mental health by connecting people, ideas and resources.

Coalition Canadienne pour la Santé Mentale des Personnes Âgées Promouvoir la santé mentale des personnes âgées en reliant les personnes, les idées et les ressources.



If you would like to be a member join us!

You can reach us through:

www.ccsmh.ca

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